INTEGRATING SUSTAINABILITY INTO PROFESSIONAL ACCOUNTING EDUCATION

By

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ABSTRACT

The purpose of this thesis is to examine the pathways and processes for integrating sustainability into Professional Accounting Education (PAE). The research combines Complex Adaptive System (CAS) theory and Institutional theory to analyse the multiple patterns of change and the influence of structural elements and agency on the change process. A qualitative case study research design using multiple cases of the UK and Nigeria was adopted to demonstrate the significance of context and produce analytical insights on how sustainability becomes integral to PAE. Documentary evidence was analysed alongside semi-structured interviews with diverse stakeholders in PAE to generate rich empirical evidence on the process of change.

The findings reveal that the accounting profession adapts to external pressures to remain relevant with sustainability, providing an opportunity for reinventing accounting knowledge and expertise through PAE. Feedback mechanisms in the sub-systems of accounting: regulation, practice and research influence the pace and direction of integrating sustainability in PAE. Each profession faces different sets of enablers and constraints based on institutional conditions, and actors in the UK and Nigerian professions have diverse interests and roles which affect their capacity to channel changes using various forms of institutional work. The findings also present a holistic approach to embedding sustainability in PAE through knowledge content, ethics, and competencies.

This research contributes to mapping the process of integrating sustainability into PAE and reveals the different pathways and dynamics of integrating sustainability into PAE determined by the pressures on the profession, context of PAE, and capacity of actors. Insights from this research are beneficial to standard-setting so that institutional processes can be more effective in integrating sustainability into PAE.

DEDICATION

I dedicate this thesis to God, Almighty who makes everything beautiful in His time.

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LIST OF ABBREVIATIONS

A4S	Accounting For Sustainability
ACCA	Association of Chartered Certified Accountants
ACD	Accounting Academia
ACPE	Accounting Practitioners
ANAN	Association of National Accountants of Nigeria
ASPN	Association of Sustainability Practitioners
CAI	Chartered Accountants Ireland
CBN	Central Bank of Nigeria
CIMA	Chartered Institute of Management Accountants
CIPFA	Chartered Institute of Public Finance and Accountancy
CPD	Continuing Professional Development
ESG	Environmental Social and Governance
FRC	Financial Reporting Council
FRCN	Financial Reporting Council of Nigeria
ICAEW	Institute of Chartered Accountants in England and Wales
ICAN	Institute of Chartered Accountants of Nigeria
ICAS	Institute of Chartered Accountants of Scotland
IFAC	International Federation of Accountants
IFRS	International Financial Reporting Standards
IPD	Initial Professional Development
ISSB	International Sustainability Standards Board
MCATI	Mutual Cooperation Agreements with Tertiary Institutions
NAICOM	National Insurance Commission
NIRC	Nigerian Integrated Reporting council
NSE	Nigerian Stock Exchange
NSEC	Nigerian Securities and Exchange Commission
PAB	Professional Accounting Body
PAE	Professional Accounting Education
PTP	Professional Tuition Provider
REG	Regulators
SD	Sustainable Development

SDG	Sustainable Development Goals
UN	United Nations
UNGC	United Nations Global Compact
UNPRME	United Nations Principles of Responsible Management Education
WBCSD	World Business Council for Sustainable Development

CHAPTER 1: INTRODUCTION

1.0 Setting the Scene

At the United Nations Conference on Sustainable Development in 2012, Peter Bakker, the president of the World Business Council for Sustainable Development (WBCSD), declared that 'accountants will save the world' (Bakker, 2013). Such an ambitious declaration is met with critical questions about why the world needs saving, why accountants, and how they would actualise this ambition. The world needs saving based on evidential ecological damage and social inequalities spread across developed and developing countries (United Nations Development Programme, 2020). Severe flooding in Pakistan and Sudan, heatwaves in the United Kingdom, droughts in Somalia and Ethiopia, and wildfires in California are just some of the examples of environmental disasters resulting in loss of life, famine, destruction of homes and livelihoods, and increased risk of diseases (Das, 2022). In this array of unprecedented occurrences is the Covid-19 pandemic which further exacerbated the fragility and volatility of global environmental, social, and economic systems (United Nations, 2022).

Pandemics and nature-related disasters are known to humanity, but for some reason, these events are manifesting at an unpredictable, more extreme, and grander scale than ever before (UNDP, 2020). The planet's current condition is recognised as the Anthropocene era, marked by the impact of human activities on the natural environment that have caused cascading socio-ecological system changes (Rockström *et al.*, 2009; Lewis and Maslin, 2015; Bebbington *et al.*, 2019). The World Economic Forum's (WEF) 2023 Global Risk Report highlights the severity of climate and nature-related risks as ranked in the top five long-term risks that are nearing tipping point and could unfold into catastrophic outcomes (WEF, 2023). Ecological pressures emanating from the Anthropocene era generate novel uncertainties for humanity and significantly affect global social and economic outcomes (UNDP, 2020, 2022). The

consequences of ecosystem collapse, such as climate change, biodiversity loss, natural resource depletion, and severe weather are structurally linked with other long-term social and economic challenges the world seeks to address. For instance, climate change-induced weather variability is linked to higher poverty rates, health vulnerabilities, food insecurity, and reduced economic productivity, disproportionately affecting low-income countries without the resources and investments to mitigate these challenges (UNDP, 2022).

The entirety of environmental, social, and economic concerns has culminated in the global agenda for sustainability. Gray and Collison (2002, p.806) describe sustainability as 'the responsible deployment of environmental resources to maintain the biosphere in a life-supporting state and to enable societies to have access to those resources to satisfy their needs'. Although their definition predates more recent work, it clearly links to the construction of a safe operating space for humanity in the Anthropocene (Rockström *et al.*, 2009). In 2015, the United Nations (UN) moved to formalise actions for sustainability through the 17 Sustainable Development Goals (SDGs), which urges governments at all levels to act on these goals (United Nations, 2015). After several years of action, progress on SDG targets has been disappointing on each goal with imbalances across countries (Sachs *et al.*, 2022; United Nations, 2022). Likewise, government prioritisation of climate action and mitigation of biodiversity loss has been relegated because of immediate economic pressures such as the cost-of-living crisis and economic recession triggered by the Covid-19 pandemic (WEF, 2023).

Achieving the SDGs is not a responsibility for governments alone, as Businesses and organisations have shown the commitment to engage with the SDGs. Coalitions such as the WBCSD and the UN Global Compact (UNGC) serve the purpose of driving businesses to act ethically and responsibly to support the actualisation of the goals (WBCSD, 2021; UN Global Compact, 2021). Prior to the SDGs, several reporting frameworks such as the Global Reporting

Initiative (GRI), Sustainability Accounting Standards Board (SASB), and Integrated Reporting (IR) played significant roles in spreading sustainability practices enabling businesses to be accountable for their social and environmental impacts (Larrinaga and Bebbington, 2021). A recent KPMG survey (2022) brings business SDG commitments into perspective in that 96% of Global 250 companies report on sustainability issues, with most referencing their contributions to the SDGs using various metrics.

Accounting is tightly interwoven into deliberations of sustainability and organisations through its array of functions, including financial reporting, management accounting, decision analysis, auditing and assurance, and taxation. As such, accounting for sustainability offers the tools and techniques to help organisations plan, manage, report, and assure information about their environmental and social impacts (Lamberton, 2005; Schaltegger and Burritt, 2010). Notwithstanding, conventional accounting practice focused on profit maximisation and shareholders' interests has been condemned as part of the root cause of unsustainability that has brought the world to its current position (Gray, 1992; Hopwood, 2009; Gray, 2010). Corporate scandals such as Enron further undermine the capacity of accounting to make organisations act ethically and responsibly, and to create meaningful change for society (Hopper, 2019). Accounting is equally a condition and a consequence of the world as it exists, constructed through intellectual and practical actions (Boyce, 2017).

Rather than focusing on conventional accounting thought, accounting can be mobilised to serve wider accountability and stewardship functions to characterise how organisations interact with socio-ecological systems (Atkin *et al.,* 2015; Bebbington *et al.,* 2017; Russell *et al.,* 2017). A socio-ecologically informed accounting can aid the operationalisation of complex sustainability problems, produce different forms of accountabilities, and account for socio-ecological interconnections (Bebbington and Larrinaga, 2014; Atkins *et al.*, 2015; Russell, Milne and Dey,

2017; Bebbington *et al.,* 2019). Likewise, professional accountants would have a role in the sustainability agenda as guardians of the public interest to intervene in translating and adapting the SDG targets into organisations (Bebbington and Unerman, 2018). Yet, studies also show that in many cases, accountants are conservative in their interaction with sustainability issues, and are less involved in sustainability practices compared to other professionals owing to their limited knowledge and expertise in such matters (Schaltegger and Zvezdov, 2015; Egan and Tweedie, 2018; Ascani, Ciccola and Chiucchi, 2021).

These observations suggest that Bakker's ambition for accountants to save the world is optimistic, but it is also persuasive within the literature. This belief could also be an exaggeration of the capacity of accountants and an underestimation of the nature of sustainability challenges. Indeed, there is reasonable progress on sustainability, enabled through accounting techniques and languages in conjunction with many disciplines in sustainability science. Still, almost a decade since the original statement, Bakker admits that accountants are lagging, and the profession has not done enough to integrate sustainability into the core of accounting (ICAEW, 2021). With the recent International Financial Reporting Standards (IFRS) Board proposals on sustainability accounting standards, the role of accountants is about to be more substantial and binding (Abela, 2022). In response to IFRS's proposed sustainability accounting standards, the International Federation of Accountants (IFAC) produced an action plan for the accounting profession declaring that:

> "With the establishment of the International Sustainability Standards Board (ISSB), the way forward is clear: The accountancy profession must lead on climate reporting and other material environmental, social and governance disclosures and their assurance—contributing to strong and sustainable financial markets and economies and enabling the UN's Sustainable Development Goals." (IFAC, 2022, p.1)

Buttressing the above statement, IFAC has reviewed its strategic plan to incorporate the SDGs and suggested that professional accounting bodies (PABs) have a responsibility to build capacity for sustainability so that accountants are well placed to address such issues in the context of their work (IFAC, 2022). These changes amongst accounting organisations have been linked to the public interest obligations of the profession. Larger accounting bodies, particularly in the UK, produced educational and guidance materials for several years and advocated for necessary changes in sustainability regulation (Larrinaga and Bebbington, 2021; Unerman, 2021). Nevertheless, PABs have uneven interactions with sustainability, and some lack the capacity to provide sustainability education that will enable students and members to develop the necessary skills and competencies. Scholars have argued that sustainability problems are not resolvable within the status quo of accounting and education and require in-depth reformation of both (Gray, 2010; Gray, 2013).

In many cases, sustainability can be mischaracterised in a way that deviates from the reality of the problems at stake in favour of milder actions that lead nowhere. Even with the potential for regulation and harmonisation of sustainability reporting frameworks, the current stance and proposal overestimate the ability of standard setting and investor-based prioritisations along the market-based pathway to change (Adams and Abhayawansa, 2022). Notwithstanding, one can agree that accountants have a significant role to play in the sustainability agenda, which can only be made possible by a thorough understanding of the complex nature of sustainability and the far-reaching consequences that emanate from the actions of accounting, business, and society (Gray, 2019). It remains to be seen how the accounting profession handles its role in the sustainability agenda and ensures accountants develop knowledge, skills, and competencies to address sustainability. Indeed, this is the focus of this thesis.

The rest of the chapter is divided into four sections. Section 1.2 examines the research motivation and problem statement, while section 1.3 outlines the research questions and discusses their relevance to the core purpose of the thesis. The significance of the thesis and its intended contributions are discussed in section 1.4. Lastly, section 1.5 presents an overview of the thesis chapters.

1.1 Motivation and Problem Statement

Education has been identified as central to developing sustainability knowledge, skills, and competencies, which are highly relevant to every discipline and profession (Sterling and Huckle, 2016). Likewise, for decades accounting researchers have raised concerns about instituting critical, environmental, and social forms of knowledge (covering sustainability issues) into accounting education programmes (Mathews, 2001a; Gray and Collison, 2002; Boyce *et al.*, 2012). University accounting programmes increasingly contain examples of sustainability integration into accounting curriculum and education (Hazelton and Haigh, 2010; Gray, 2013; Botes, Low and Chapman, 2014). However, there is less evidence of how sustainability materialises in the professional training of accountants, with only a few studies considering the connections between professional accounting education (PAE) and sustainability (Gray and Collison, 2002; Owen, 2013; Boulianne and Keddie, 2018; Boulianne, Keddie and Postaire, 2018).

Gray and Collison's (2002) polemic study is one of the earliest to consider the implications of sustainability for PAE on the premise that sustainability issues are fundamental to the accounting profession's public interest mandate; though they also note that the profession's capacity to act in line with the public interest is often in conflict with its self-interest and the service of clients. Lee (1995) contends that accountancy should be a vocation where the service of a client also involves duties to a wider public with an enforceable public accountability to

satisfy these duties. In contrast, Gaffikin (2009) argues that accounting should balance the interests of the clients, the accountant, and society. The definition and application of the public interest may remain unsettled, but the profession, particularly PABs sustain the public interest by ensuring that clients and the public can trust the expertise of accountants founded in its curated body of knowledge and education process (Paisey and Paisey, 2014).

Equally of importance is examining the contexts by which accounting education is structured, as well as how sustainability can be facilitated within these contexts. Accounting education is certainly of global interest, but the educational experiences of accountants and the consequence of professional education cannot be separated from the cultural, economic, and legal conditions in each country (Calhoun and Karreman, 2014). In addition, the phases of accounting education, including university degrees, professional training, and continuing professional development, are organised differently in each context based on national drivers and factors (Calhoun and Karreman, 2014; Needles, 2014). In the same manner, sustainability issues are highly contextual and characterised as loosely structured, multi-dimensional, multi-disciplinary, political, and dynamic (Bebbington, Thomson, and Russell, 2017). Consequently, the diverse settings for PAE and sustainability presents distinctive constraints and enablers in the effort to ensure accountants are educated on sustainability.

Another factor stems from the roles and interests of heterogeneous stakeholders in the design and delivery of accounting education (Helliar, 2013; Calhoun and Karreman, 2014). Academics and practitioners often present opposing views on accounting education; academics believe education is about intellectualisation and providing a theoretical foundation for practice, whereas practitioners focus on vocationalisation and providing work-relevant skills (Evans, 2014). Both are equally relevant to PAE, and there are indications that the criticisms from both parties led to reoccurring reforms in the design of accounting education to include ethics,

critical thinking, and interpersonal skills (Parker, 2001; Paisey and Paisey, 2006; Boyce *et al.*, 2012; Flood, 2014). Any proposed reforms in PAE will certainly take into account the diverse views of the range of stakeholders which are sometimes contrary. The challenge with accounting education reforms is that the professional knowledge underpinning the expertise of accountants is ever-changing and expanding despite the limited capacity inherent in its current structure and rigorous demands on trainees (Paisey and Paisey, 2006).

Advancements in accounting research, regulation, and practice on sustainability (i.e., social and environmental issues) presumes that education should follow the same trajectory of addressing these concerns (Gray, 2013; Contrafatto, 2013; Deegan, 2017; Boulianne, Keddie and Postaire, 2018). PABs have become more proactive in championing sustainability issues with many institutions discussing re-imagining the profession in response to significant environmental changes and altering the training pathway for the skills and competencies of accountants (IFAC, 2019a; ACCA, 2016). However, the academic literature and PAB effort still has a heavy focus on sustainability curriculum, content, or teaching. Altering just the curriculum will not result in the type of transformation required in the character and expertise of professional accountants. As hinted in earlier discussions in this section, the fundamental issue rests on a systemic challenge in accounting about its purpose, the role and structure of education, and how it treats the needs of diverse stakeholders (Gray and Collison, 2002; Boulianne, Keddie and Postaire, 2018).

Professional education and training offered by PABs is central to deliberations about how accountants develop sustainability knowledge and competencies for several reasons. The requirements to be an accountant are dependent on passing the professional qualification of the PABs, PABs influence university education through accreditations, and qualified accountants are still mandated to continue post-qualification training, generating the possibility of backward

and forward integration of sustainability in the phases of accounting education. Hence, one can argue that integrating sustainability into accounting education should focus on the crucial professional training phase where most accountants are inducted as members of the profession. The gaps in the literature focusing on how professional accountants acquire sustainability knowledge justifies examining how this process may evolve. Consequently, the aim of this research is to investigate how sustainability is integrated into PAE by identifying the elements, relationships, pathways, and approaches for this integration while also exploring the different settings of the UK and Nigeria.

1.2 Research Questions

The purpose of this thesis is to investigate how sustainability is integrated into PAE on several fundamental levels; starting with the accounting profession's standpoint on the matter, the structural conditions for integration, the involvement of interconnected actors, and the design and delivery of education, which are all intertwined in the change process. Closely related to the central research aim is a nuanced analysis of the pathways for integrating sustainability that recognises the contextual differences that exist for the accounting profession, sustainability, and PAE. On this basis, the following research questions will be addressed in this thesis:

Research question 1: How is the accounting profession evolving to integrate sustainability into professional accounting education?

The accounting profession continually seeks to adapt to its larger environment by changing the application of its knowledge base to new areas (Lee, 2013). With the desire for sustainability shifting how socio-economic activities are organised, the accounting profession will have to confront new challenges and opportunities that would determine how it could integrate sustainability. Hence, this research will first examine why and how the accounting profession embraces sustainability and its diffusion into PAE.

Research question 2: How do structural elements in the accounting profession influence the integration of sustainability into professional accounting education?

This research takes a multidimensional view of structural elements defined in two levels. First, the structure of the accounting profession as a functional system involving adjoining sub-elements of practice, regulation, research, and education will influence changes, especially in a globalised accounting profession. The second layer of structure refers to the institutional context surrounding each profession, including the rules and norms by which the accounting profession operates and reproduces itself. Investigating how these structural elements shape the integration of sustainability into PAE is the target of the second research question.

Research question 3: How do actors influence the integration of sustainability into professional accounting education?

Integrating sustainability into PAE involves heterogeneous actors influencing education policies, practices, and outcomes. Actors including PABs, accounting academics, employers, regulators, accounting firms, practitioners, tuition providers, and accounting students, are critical to PAE, especially since they can enact change and influence the process of education provision through their interactions. Exploring how actors' roles and actions channel sustainability into PABs is crucial to this thesis and will be addressed in the third research question.

Research question 4: How is sustainability embedded into the professional accounting education framework?

Having addressed the macro issues, determining how sustainability is embedded into aspects of PAE has a pragmatic focus. The objective of the fourth research question is to evaluate the views about the appropriate approach to embedding sustainability which will vary based on practical constraint, and opinions about sustainability and the purpose of accounting education.

1.3 Significance of the Research

Changes in accounting education are often approached as a matter of introducing additions into the curriculum and mode of learning. Instead, this thesis seeks to make empirical and theoretical contributions to the literature on sustainability education in the accounting profession by examining the structural conditions of professional change processes as well as the different interests shaping it. The research extends prior empirical studies by examining cross national cases of education reforms in the accounting profession. To this extent, this research promotes empirical diversity in the literature by analysing how the UK and Nigerian professions address sustainability in their education process to demonstrate the importance of context and institutional factors in their approaches. As such, this research elucidates the structural conditions that impede and enable embedding sustainability in PAE and the role of actors in channelling this process of change through rich qualitative evidence. The value of these empirical contributions is that it deepens our understanding of how the accounting profession more broadly envisions and approaches sustainability education for accountants from different backgrounds, and offer unique insights into the pathways of change for professions and education systems in different contexts.

Second, the research is significant for its theoretical applications that combines the established Institutional theory with a Complex Adaptive Systems (CAS) approach to elaborate the multiple dimensions of change for the accounting profession to integrate sustainability into PAE. The CAS approach is seldomly adopted in accounting studies, so its application in this research offers an alternative theorisation to address questions relating to professions as social systems of knowledge and practice. As adopted in studies of other professions (Chaffee and McNeill, 2007; Polacek *et al.*, 2012; Woodruff, 2019), CAS is applied in this thesis to map the system of PAE which includes different actors with various interests and roles and to explore

the pathways by which sustainability becomes embedded. Likewise, Institutional theory is employed in this thesis to examine the institutional conditions and the exercise of agency in integrating sustainability into PAE (Greenwood, Suddaby, and Hinings, 2002; Lawrence and Suddaby, 2006; Lawrence, 2008; Ziestma et al., 2017).

While these theories and their conceptual tools have not previously been simultaneously applied to studying professional change processes, their compatibilities enable a multilayered analysis of the research questions through theoretical triangulation that allowed learning points between them. A noteworthy theoretical contribution of this thesis is implementing theoretical triangulation which can be a challenging element in studies employing more than one theory. The details of this process are discussed in subsequent chapters of the thesis, but it is especially important in this case because both theories are used holistically to address the research questions without seeking comparative inferences but by incorporating the compatibilities and distinctiveness of each.

Sustainability in accounting education presents several options in the approach to knowledge, depth of learning, and learning outcomes (Mburayi and Wall, 2018). Based on the intensity and urgency of sustainability deliberations, various stakeholders in the accounting profession and education of accountants will have different views on integrating sustainability into PAE. This research brings to the fore these debates on how accountants become responsible and accountable towards environmental and social issues by acquiring competencies for achieving sustainability goals through an all-inclusive education. Thus, the findings of this research will be of interest to accounting academics, professionals, organisations, and, more importantly, the policymakers involved in the education of accountants for sustainability. Integrating sustainability into PAE is paramount because of its implications for accountants in facilitating

sustainability transitions in organisations and fulfilling their public interest responsibilities for the common good of society.

1.4 Structure of the Thesis

This thesis is organised into nine chapters and begins with Chapter 1, which introduces the purpose and scope of the thesis.

Chapter 2 reviews the literature on three interconnected topics, the accounting profession, sustainability, and education, which frames the context by which accountants will acquire sustainability knowledge and competencies in their professional training. This chapter also examines the professionalisation of accounting from a critical perspective and interrogates professional claims of intellectual knowledge base and service of the public interest to understand how and why the profession adapts to sustainability. In addition, it discusses key issues in accounting education more broadly, and describes the IES knowledge framework for PAE. Likewise, the chapter reviews the various understandings of sustainability, its connection with accounting, and the role of accountants in addressing sustainability matters. It considers the general approach to sustainability education and evaluates studies that deal with sustainability in accounting education, which so far has mainly focused on the practical aspects of education at the university level.

Chapter 3 presents the theoretical framework of the research built on Complex Adaptive Systems (CAS) and Institutional theories. This chapter lays the foundation for using CAS theory by highlighting core CAS features in terms of structure, behaviour, outcomes, the nature of CAS change, and its relevance for understanding the functioning of the accounting profession. Next, the chapter analyses institutional theory in which the accounting profession is viewed as a field shaped by institutional pressures and the agency and power of actors to produce various

change patterns. The elements from both theories are synthesised to build an intermediating theoretical framework to comprehensively assess the pathways, mechanisms, and contextual issues in integrating sustainability into PAE.

Chapter 4 describes the methodology used to conduct this research. It considers the philosophical assumptions underlying social science research and the philosophical paradigm assumed for this study. It details the research approach and justifies using a qualitative case study design and the selection of the UK and Nigeria as cases. This chapter also details the data collection process, ethical considerations, method of data analysis, and limitations of the research strategy.

Chapter 5 offers an overview of the case contexts, including descriptions of the profession, PAE system, and sustainability materialisations in the UK and Nigeria. This chapter also incorporates the findings from the documentary analysis of institutions in the UK accounting profession to produce an extensive description of the PAE system. This description is also presented in the form of a system map to visualise the interactions of various actors and how sustainability can be channelled into the PAE system through multiple interconnections.

Chapter 6 discusses the empirical findings and insights from the interviews with diverse groups in the UK accounting profession on integrating sustainability into PAE. There are six thematic categories presented in this chapter. First, the drivers of sustainability integration in PAE demonstrate that accounting education changes in line with external pressures, and the profession has clear motivations for including sustainability in professional education. Second, it explores the interviewees' understanding of sustainability, showing a broad spectrum of sustainability interpretations rooted in different beliefs. Third, the analysis identifies how the accounting domains of regulation, practice, research, and education interact to curate the pace

and direction of changes in PAE. Fourth, the chapter elucidates themes about the role of field actors, their interactions, and their actions towards sustainability. The fifth theme features the barriers and strategies that condition the change process, while the sixth offers practical approaches to integrating sustainability into accounting knowledge frames contained in PAE.

Chapter 7 presents the findings from interviews with elements in the Nigerian accounting profession in six different thematic areas. First, the chapter elucidates the drivers of changes in PAE, demonstrating the consequences of internationalisation, immediately followed by the second theme revealing the interviewees' interpretations of sustainability. Third, the chapter brings to fore the motivating and constraining factors to integrating sustainability into PAE, which are mostly steered by the country's socio-economic conditions and other external factors. The fourth thematic area offers insights into the role of actors that produce changes in the structure of PAE and considerations of sustainability, which has bearing to the fifth theme on the pathways to change which involves certain actors and alliances. The sixth section of the chapter outlines the implications of sustainability integration in PAE in Nigeria.

Chapter 8 offers a discussion of the findings in relation to the literature review and theoretical framework. The chapter takes an integrative approach to discuss the findings from both UK and Nigerian cases in a way that highlights their parallels and contrasts to answer the research questions. The development of sustainability in PAE is driven by endogenous factors defined by concerns for the relevance and survival of the accounting profession in association with exogenous pressures produced from disruptions in issues such as technology and sustainability, globalisation, and business and regulatory pressures. Some themes are common across settings, while others receive greater emphasis in specific settings. Actors' interpretations of sustainability in both cases can be mapped against sustainability conceptions based on various ideologies and approaches to change showing how the accounting profession might respond to

sustainability through its education process. There are feedback loops in the structure of the accounting profession that enables non-linear patterns amongst the domains of accounting. There are differences in the institutional dynamics of the UK and Nigeria which reflect uneven capacities of actors to channel change and dependence on different strategies to produce effects that lead to the integration of sustainability in PAE. The approach to sustainability in PAE encompasses the knowledge content, ethics, and competencies, which links to the approach in the education for sustainability literature.

Finally, chapter 9 provides the summary, reflections, and conclusions to the research. It summarises the thesis and its findings and explains how this research contributes to the literature, theory, and practice. It contains the researcher's reflection on the research project and finalises with discussions of the limitations and areas for future research.

CHAPTER 2: THE ACCOUNTING PROFESSION, EDUCATION, AND SUSTAINABILITY

2.0 Introduction

As accountants develop and act upon sustainability knowledge, fundamental questions arise as to how this activity frames the purpose of the profession, the role of accounting education, and the meaning of sustainability and its relation to accounting (Gray and Collison, 2002). The opening chapter of the thesis briefly highlighted these topics, and this chapter delves further to examine the relevant literature and identify the gaps in how the profession seeks to integrate sustainability into PAE. Prior studies refer to the public interest purpose of the accounting profession as the principal justification for acting on sustainability matters (Gray and Collison, 2002; Nickell and Roberts, 2014; Spencer, 2020), but such assertions of the public interest must be placed in the history and context surrounding the profession's emergence and evolution. Furthermore, efforts to integrate sustainability into PAE are confounded by the incompatibilities in the structure of PAE and mounting criticisms about the deficiency of accounting education to produce skilled and ethically conscious accountants (Boyce *et al.*, 2019).

Sustainability is consistently and increasingly addressed in accounting research, practice, and policy, but the current state of professional knowledge on sustainability issues is rudimentary in comparison. Several studies demonstrating the integration of sustainability into accounting education have focused on individual academic determination or the institutional agenda of universities in ensuring that accounting students are exposed to sustainability matters (Gray, 2013; Mburayi and Wall, 2018). Meanwhile, most accountants in business and practice, particularly those without accounting degrees, would have limited encounters with sustainability matters in the context of their professional training (Boulianne and Keddie, 2018).

As such, the professional training aspect of PAE overseen by the accounting profession cannot be overlooked in how accountants become sustainability literate and competent.

The rest of the chapter is organised into five sections. The opening section (2.1) draws from the professionalisation literature to describe the origins of accounting as a profession and how accounting knowledge and the public interest has been deployed through its evolution and expansion. Section 2.2 follows by drawing attention to the issues in accounting education and the current framework of PAE. Thereafter, section 2.3 explores the connections between sustainability and accounting including the meaning of sustainability, approach to sustainability accounting, and the role of accountants in addressing sustainability issues. The next part in section 2.4 considers the broad approach to sustainability education and examines the findings from studies on sustainability in accounting education. The chapter concludes in section 2.5 with a summary and discussion of the gaps in the literature.

2.1 The Accounting Profession

Understanding how and why accounting became a profession is entrenched in history and context that is vital to the legitimation of accounting work and knowledge. Studies of professions are broadly assembled under the banner of the sociology of professions, offering a systematic approach to understanding the formation and evolution of professions using a variety of theoretical and empirical perspectives (Willmott, 1986; Saks, 2016). Earlier studies on professions are grounded in conventional notions of traits and functionalism that suggest that professions have altruistic values justifying their privileged position and status. These perspectives only provide generic models for defining professions (Birkett and Evans, 2005), and are criticised for being static and deterministic by assuming that all professions have the same histories and development paths (Willmott, 1986; Robson and Cooper, 1990). In response to these drawbacks, critical approaches have emerged in the study of professions to examine

accounting professionalisation through perspectives such as conflict theory, social closure, power and power relations, and more recently, neo-institutionalism (see Willmott, 1986; West, 2003; Walker, 2004; Muzio, Brock, and Suddaby, 2013; Richardson, 2017; Muzio, Aulakh, and Kirkpatrick, 2020).

Critical approaches explain professionalisation as a process that involves internal strategies of the occupational group and external dependencies and conditions, which has salience for analysing how the accounting profession and its agents strategise to address sustainability given that sustainability-related matters have altered the conditions and dependencies that the profession is historically rooted in. The functionalist view explains the persistence and reproduction of specific professional characteristics, such as an intellectual knowledge base and public interest proclamation, even as the accounting profession adapts to changing expectations. Within the literature mentioned above, this section demonstrates a parallel interest and relevance of both critical and functionalist perspectives which are further discussed below.

2.1.1 Professionalisation of Accounting

The historical origin of the accounting profession is traceable to the UK during the Industrial Revolution of the nineteenth century, where key occupational groups undertook a professionalisation project to assert control over an area of expertise (Lee, 1995). Critical studies show that professionalisation is more than a social contract whereby an occupation gains certain rights in exchange for fulfilling societal needs and expectations as proposed by the traits-functionalist perspective, and that accounting practitioners were deliberate and strategic in seeking to professionalise (Walker, 2004; Muzio, Brock, and Suddaby; 2013; Richardson, 2017). Willmott (1986) labels professional accounting associations as political institutions striving to define, defend, and expand the value of their skills and expertise. To accomplish their goals, professional accounting associations used strategies, such as exercising power over

the supply of their services, regulating associational membership, and sustaining an ideology of beneficial service to consumers and society (Lee, 1995; Birkett and Evans, 2005).

Furthermore, external dependencies conditioned and consolidated accounting practitioners' pursuit of higher social status and labour autonomy (Willmott, 1986; Robson and Cooper, 1990; Birkett and Evans, 2005; Richardson, 2017). External dependencies at the time of accounting professionalisation encompass the exogenous factors that supported accountants' effort, such as technology change, the social and political environment, and the Industrial Revolution, which unsettled the status quo and led to new occupational domains and specialities (Birkett and Evans, 2005, Richardson, 2017). The inception of the 1862 Companies Act and the 1869 Bankruptcy Act disrupted competing professional jurisdictions and was instrumental to the rise of accounting professionals amidst rivalry with the legal profession (Walker, 2004). These factors created the demand for accounting services from the rise of capitalism, increasing regulations, and social pressures (Wilmott, 1986; Robson and Cooper, 1990). Social pressures meant that the accounting profession was responding to the needs of society as many aspects of social life were being redefined in financial terms (Robson and Cooper, 1990), while trying to distinguish its services and status from the legal profession (Richardson, 2017).

Accountants engaged in disputes with other occupations regarding practice rights and the worth of their expertise (Lee, 1995; Cooper and Robson, 2006). In particular, accountants closely emulated the established model of the legal profession, their competitors at that time, to gain professional status (Richardson, 2017). The claims over the jurisdiction of work and expertise are adjudged by powerful others such as the State, clients, and the public (Abbott, 2005). The profession's ability to achieve and retain its privileged position depended on its willingness and capacity to influence these groups and leverage social and political dependencies. Based on the

public interest, the profession appealed to the State in intervening over labour contestations involving occupational groups and guaranteed self-regulation for accountants (Robson and Cooper, 1990; Lee, 1995; Birkett and Evans, 2005). The use of State support and power in giving accountants rights over legislated functions such as audit was eventually won, with accountants' reputations secured through royal charters. This is an example of the profession attaining social closure that excludes others and circumscribes the boundary of professional services (Richardson, 2017).

Accounting attained professional status with the endorsement of the State, yet the two have a long-standing, complex, and mutually dependent interaction that concurrently supports and limits each other (Willmott, 1986; Lee, 1995; 2013). Richardson (2017) articulates this interaction in that the State expects the profession to provide services for the maintenance and regulation of commercial and socio-economic activities, while the profession relies on the State to legitimate and reinforce its position. Accountants also consolidate relationships with their customers (clients) by positioning their knowledge and skills in solving problems and meeting imminent needs and creating a social distance that renders them capable of determining the scope of their task and its execution (Willmott, 1986). Establishing trust and confidence with clients aided accountants in asserting the relevance of their competencies and services (Robson and Cooper, 1990; Richardson, 2017; Muzio, Aulakh, and Kirkpatrick, 2019). Altogether, professions are concerned about their status in relation to changes in adjoining institutions such as the State, clients, the public, and other occupations.

Most previous studies on the accounting profession are based on the Anglo-American context, which sometimes tends to treat their conclusions as universalised explanations of professionalisation processes and outcomes. However, the UK accounting profession, through

links to the former British Empire, transmitted their accounting model to other parts of the world and was involved in curating and even resisting the emergence of accounting associations in former British colonies (Parker, 2005; Richardson, 2017; Yapa, 2021). Many former colonies depended on the educational services of UK PABs who were interested in increasing their global influence (Chua, 2002; Yapa, 2021). Accounting professionalisation embedded in colonial experiences is distinct for many countries and raises concerns about the long-term effects of an accounting profession that serves neo-imperialism rather than indigenous interests (Wallace, 1992; Annisette and Neu, 2004; Uche, 2010; Chua and Poullaos, 2002; Bakre, 2006; Poulloas and Sian, 2010). Delineations of professionalisation processes are necessary due to the scope of this thesis which focuses on the UK and Nigeria, both of which have different professionalisation paths but are connected through the history of the former British Empire.

In the Nigerian context, Uche (2010) criticised the role of colonial structures in creating the accounting profession given that the former Empire imported British laws which disregarded local conditions, favoured British accountants through racial stratification, and perpetuated the suppression of local initiatives through its professional education systems. Foremost accountants in Nigeria were British-trained and upheld the ideology, standards, and expectations of the UK profession, particularly the brand of the Institute of Chartered Accountants of England and Wales, hereafter ICAEW (Wallace, 1992; Parker 2005). The founders of the Institute of Chartered Accountants of Nigeria (ICAN) employed paradoxical strategies in actualising professional autonomy and self-regulation. On the one hand, they appealed to the nationalist agenda of the State in striving for independence from British rule and the need to produce an indigenous workforce for the economy; on the other hand, they sought legitimacy from UK professional associations through their branding and education procedures (Wallace, 1992; Uche, 2002; 2010). Therefore, the State and foreign figures

perpetuating neo-imperial and capitalist ties still influence the Nigerian accounting profession long after the profession has been established.

The impacts of globalisation have replaced broader processes of colonialism and imperialism (Yapa, 2021), such that accounting knowledge and practices increasingly converge around Anglo-American norms. Taking advantage of the globalisation trend, UK accounting associations shifted their focus to the export of examinations admitting accountants from all over the world through mutual cooperation agreements (Briston and Kedslie, 1997; Richardson, 2017). Likewise, accounting firms have become transnational entities propagating neo-liberal norms, policies, and practices and influencing global regulations (Faulconbridge and Muzio, 2013, Boussebaa, 2015; Richardson, 2017). These contemporary trends are habituated in the activities of the profession (particularly those from Anglo-American countries) in addressing potential threats by creating more robust transnational regimes such as IFAC[1], harmonising accounting standards, enforcing comparable accounting practices and education (Cooper and Robson, 2006; Hopper, Lassou and Soobaroyen, 2017). Thus, accountants are deemed experts at deploying new strategies and altering old approaches to maintain professional power and occupational control (Birkett and Evans, 2005).

Critical studies analyse professionalisation as a context-oriented, dynamic process occurring from an intentional strategic plan to achieve social and economic power under specified conditions (West, 2003, Birkett and Evans, 2005). Although issues of motives, conflicts, and allegiances can be shared amongst accounting professional associations, they are shaped and constrained by social, political, and economic factors in every country so that each might produce nuanced accounts of professionalisation (Richardson, 2017). Moreover,

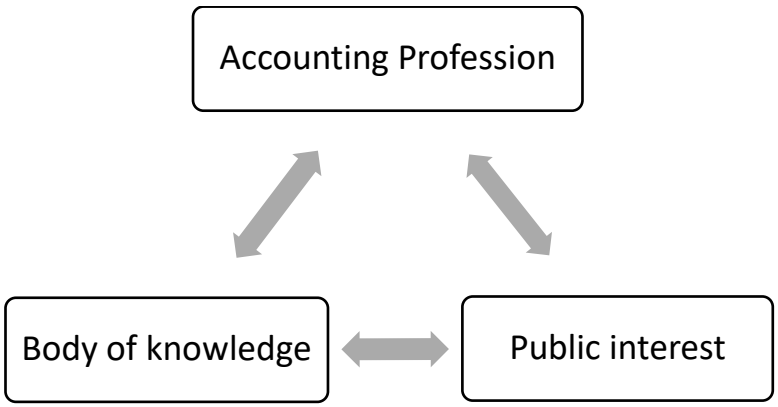
[1] IFAC is a voice for professional accountants around the world that produces international standards on auditing, ethics, and accounting education and training (Hopper et. al, 2017, IFAC, 2022).

professionalisation is not a static occurrence but is reconfigured as professionals face disruptions caused by the complexity of social and environmental issues confronting society, changes in market demand for services, and frequent professional scandals (Muzio, Aulakh, and Kirkpatrick, 2019). Insights from the extant literature imply that accounting professionalisation is the reoccurring process whereby accountants strive to create, reinvent, and defend their acquired status as they confront threats and opportunities introduced by social, political, and economic circumstances.

2.1.2 Accounting Knowledge and the Public Interest

Hughes (1963, p.656) defines a profession as: 'the occupation which one professes to be skilled in and to follow, a vocation in which professed knowledge of some branch of learning is used in its application to the affairs of others, or the practice of an art based upon it'. Thus, the functionalist perspective in the sociology of professions literature argued that professions needed to develop specialised knowledge as proof of expertise (Hughes, 1963; Abbott, 1988; West, 2003). In this regard, the accounting profession evolved a systematic intellectual basis for accounting expertise claiming to serve the public interest (Sikka, Lowe, Wilmott, 1989; Lee, 1995). The formation of accounting knowledge into an education discipline was strategic in advancing accountant's claim to professionalisation, given that it distinguishes members of the profession from non-members, especially from the perspective of the public, State, and market (Abbott, 1988). The notion of a body of knowledge and the public interest as crucial functions underpinning the accounting profession informs a conceptual framework shown in Figure 2.1 below:

Figure 2.1: Conceptual framework based on the function of the accounting profession



Source: author's depiction

While some occupations become professions by developing an intellectual appeal, others follow an approach originating from practice (Hughes, 1963). Medicine and engineering are professions that are deemed to prioritise the intellectual path of pursuing knowledge to improve practice (Hughes, 1963), while accounting falls into the latter category. Rudimental forms of accounting knowledge were grounded in practice and techniques rather than theory, and the theory informing accounting practice was formulated much later (Lee, 1990; 2013). Early accounting educators were practitioners emphasising practice-based teaching after which accounting progressed into an academic discipline with full-time teachers and researchers in universities (Lee, 1995; Stevenson *et al.*, 2018). In most professions, the demarcation between theoretical and practical knowledge often results in conflict over which issues pertain to either aspect (Hughes, 1963). Academics may criticise practitioners for lacking sufficient intellectual foundations, while practitioners would retort that academics are too theoretical (Lee, 1990; Lee, 2013). This tension survives in our current time in the context of sustainability knowledge, as will be discussed in subsequent sections of this chapter.

Accounting associations adopt ideological expressions of the public interest into professional education and practice to promote hegemony and garner societal support (Birkett and Evans,

2005). The accounting profession has vaguely defined its public interest obligation despite it being a weighty and well-known proclamation by professional accounting bodies in their charters (Willmott, 2021). Its definition depends heavily on different ideologies and values which may be difficult to validate as a unifying whole (Sikka, Willmott & Lowe; 1989, Willmott; 1990; Baker, 2005). Another criticism is that the commitment to serve the public interest through developing independent technical knowledge has been relegated in favour of the profession's self-interest (Sikka, Willmott and Lowe, 1989; Lee, 1995; Sikka *et al.*, 2007). The failure of accounting to deliver on its public interest mandate of acting with integrity and competence is made visible in various corporate failures and ethical scandals that have increased public scrutiny on the value of accounting expertise (Lee, 1995; Boyce, 2008).

Lee (2013) argues that the profession should not be held solely responsible for the tensions in the accounting body of knowledge since others, such as regulators and other occupations, have a vested interest in this knowledge. In times past, engineers first pioneered several known techniques and methods in cost and management accounting, and lawyers and politicians drove the inception of financial reporting standards (Lee, 2013). Likewise, economists also inculcated theories and principles of economic rationalism into accounting knowledge, especially since it became an academic discipline (Gaffikin, 2009; Stevenson *et al.*, 2018). Thus, the evolution of accounting knowledge has been facilitated by occupational groups beyond accounting until they become slowly adopted or endorsed by the accounting profession. It appears accounting knowledge has moved consistently with the dominant societal norms reflecting the complex relationship between accounting theory and practices (Robson and Cooper, 1990).

From other perspectives, changes in accounting knowledge can be interpreted as the re-application of the existing knowledge into new and profitable areas, not just new knowledge

derivations (Clarke and O'Neill, 2005; Lee, 2013). However, West (2003) opines that the danger with expanding accounting knowledge to adapt to unending demands with minimal critical consideration of the public interest obligation is the risk of losing its place in society as a form of specialised expertise. In contrast, one would expect that an expansion of the accounting canon and incorporation of new knowledge is a form of adaptation to broader responses to changes in expectations and needs within society (Lee, 2013), which is arguably in the public interest. The critical question regarding accounting as a profession, area of practice, and educational discipline is how it chooses to position its knowledge frame with its public interest obligation amidst emerging issues of globalisation, new technologies, and sustainability.

2.2 Issues in Accounting Education

Through professionalisation, the accounting profession dictated the production and dissemination of accounting knowledge facilitated through its education and training structures to equip members with the skills for professional service (Birkett and Evans, 2005). The profession's current perspective on the structure of PAE depicted globally through IFAC's International Education Standards (IES) which acknowledges three phases of education: pre-qualification education, Initial Professional Development (IPD), and Continuing Professional Development (CPD) (IAESB, 2019). The pre-qualification requirement for entry into professional training varies within each country and PAB (Calhoun and Karreman, 2014; Needles, 2014). While some countries such as South Africa and US require a university degree as a pre-requisite, others such as the UK and Nigeria place less emphasis on degree qualifications (Velayutham and Perera, 2008; Needles, 2014; Lubbe, 2020)

Nonetheless, several PABs use accreditations to negotiate the education arrangements between university degrees and professional training (Apostolou and Gammie, 2014; Ellington, 2017). Rather than viewing PAE in a sequential structure, PAE can be organised in many distinct ways

based on each country's legal, social, economic, and educational characteristics (Calhoun & Karreman, 2014). From the extant literature, the contentions inherent in the varied structure of accounting education include the differentiation between university degrees and professional training, disparities between relevant and non-relevant degree holders, and tensions between accounting academics, practitioners, and regulators in the provision of accounting education (Gray & Collison, 2002; Gaffikin, 2009; Evans, 2014). While the central focus of this thesis is on the professional training phase (IPD), it is better understood within the wider dynamics of accounting education provision which evokes certain disputes and critiques.

Major critiques of accounting education since the 1980s[2] all stress that accounting education fails to address the changing knowledge base, develop generic workplace competencies, and foster critical thinking and intellectual development (Langenderfer, 1987; Chu and Man, 2012; Flood, 2014). Technical competence has always been the hallmark of accounting expertise since accounting practice was the primary basis for its body of knowledge. Over time, the emphasis on technical knowledge increased in professional training through rote learning, which meant that students lacked critical thinking that enabled the application of knowledge to solve real-world problems (West, 2003; Sikka *et al.,* 2007; Gaffikin, 2009). Practitioners and academics raised concerns that technical knowledge is insufficient for the work environment, highlighting the failure of accounting education to develop generic competencies expected of accountants (Jackling and De Lange, 2009; Flood, 2014; Boyce *et al.*, 2019).

Furthermore, Sikka *et al*. (2007) contend that accounting education in the UK neglects the public interest, ethical conduct, social awareness, and life-long learning. There are other issues about how accountants are socialised into the profession with the belief that the professional

[2] The 1980s critique of accounting education include the Bedford Report (1986), the Big 8 white paper (1989), and the Accounting Education Change Commission (AECC) 1989.

examination is only a tick box exercise (Power, 1991), and a hidden curriculum that conditions the choices and ethical behaviours of accountants (Ferguson *et al.*, 2011). Several studies have problematised the deficiencies in accounting education that presents a rationalistic view of ethics, which is partially responsible for constructing dangerously rational and ethically deficient accountants (McPhail, 1999; Sikka *et al*., 2007; Ferguson *et al*., 2011; Boyce *et al*., 2019). Avoiding questions about the underlying ethical and intellectual foundations of accounting (Power, 1991, Sikka *et al.*, 2007) makes it difficult to integrate needed changes in PAE (Gray and Collison, 2002). Furthermore, changes such as the expansion of the global economy, labour force mobility, and the comparability of qualifications have increasingly stretched the boundaries of PAE (Calhoun and Karreman, 2014).

Despite the efforts at reforming PAE, Boyce *et al.* (2019) argue that the changes in PAE have not created any consequential effects because the change agendas have esteemed the needs of accounting practice and the profession above other voices. Others have argued that PAE has a bearing on many interests, including the practitioners' views, skillset needs of employers, technical developments of standards setters and regulators, students' learning expectations, and findings from academic research (Allison, 2007; King and Davidson, 2009, Helliar, 2013). In effect, the different needs and interests amongst multiple interconnected stakeholders in PAE will inform the strategies and approach for embedding sustainability. Some of those actors identified from the literature as relevant to the discussion of PAE and sustainability include (see Helliar, 2013, Calhoun and Karreman, 2014):

a. Professional accounting bodies (PABs),
b. Universities,
c. Accounting students,
d. Accounting academia,

e. Professional Tuition Providers (PTPs),

f. Professional accountants and practitioners,

g. Employers (organisations and accounting firms),

h. Professional interest institutions (e,g IFAC)

i. and the State/Government (and its agencies).

Noting these multiple interests in PAE necessitates a crucial objective in this research to further investigate the role of these actors in the process of integrating sustainability in PAE which will be further discussed in chapter 5 of the thesis. Such stakeholder approach to professional accounting education is in the public interest to provide education offerings that are context relevant, compliant with international standards, and embody stakeholder expectations (Calhoun and Karreman, 2014). The profession continues to propose and implement reforms in PAE that seek to tackle the issues raised from several quarters noting its reputation and the public interest it claims to serve, which is further detailed in the next sub-section.

2.2.1 PAE Knowledge Framework

PAE serves a dual purpose of providing knowledge and skills for future employment as well as enlightening individuals to develop independent critical thinking (Gray and Collison, 2002). In line with longstanding calls for reforms in PAE, the IES established a competency framework to meet the expectations of accounting knowledge in serving the public interest and ensuring trust in the competence and work of professional accountants (IAESB, 2019). The IES have been widely adopted by members and non-members of IFAC to achieve a comparable education quality despite national factors (Calhoun and Karreman, 2014). As shown in Table 2.1 below, IFAC's competency framework for PAE is highlighted in: IES 2, IES 3, and IES 4.

Table 2.1: IFAC's initial professional development framework

IES 2- Technical competence	• Financial accounting and reporting, • Management accounting • Finance and financial management • Taxation • Audit and assurance • Governance, risk management and internal control • Business law and regulations • Information and communication technologies • Business and organisational environment • Economics • Business strategy and management
IES 3- Professional skills	• Intellectual skills • Interpersonal and communication skills • Personal skills and organisational skills
IES4- Professional values, ethics, and attitudes	• Professional scepticism and professional judgement, • Ethical principles • Commitment to the public interest

Source: extracted from 1AESB (2019)

Technical competence lays the basis for the performance of accounting functions across organisations (IAESB, 2019). While IES 2 contains the general curriculum requirement for PAE and insists on a wide range of subjects, it does not offer guidance on the breadth and depth of coverage for each subject (Allison, 2007). The challenge with the technical component is that by constantly adding new knowledge requirements to PAE, aspiring accountants will find it difficult to possess the range and depth of knowledge and skills required in the work place (Nelson, 1995; Gray and Collison, 2002, Paisey and Paisey, 2014). Nonetheless, PABs have moved from the traditional subjects in accounting and auditing into areas of management, ethics, risk, and corporate governance, to address the changing expectations of the accounting profession (Cooper and Walsh, 2013; Hopper, 2013). The content of technical competence

develops in line with topical trends, but subject coverage and emphasis still varies amongst PABs as a distinguishing signal (Paisey and Paisey, 2014).

IES 3 defines the professional skills that accountants must develop as part of their professional training, such as intellectual, interpersonal and communication, personal, and organisational skills (IAESB, 2019). Reformists have long advocated that the learning outcomes of accounting education should include these relevant competencies and skills (Howieson, 2003; West, 2003). PABs are responsible for assessing the range of skills developed by accountants and in most cases will do so through their examinations. Pierre and Rebele (2014) are sceptics of soft skills development, citing that it further burdens the education process since the skillsets are defined vaguely by the profession and are challenging to operationalise in conventional accounting courses. Whereas Gammie and Joyce (2009) contend that skills development can be better assessed in the context of practical work experience than in technical professional examinations. So, the profession must design a formal system of assessment that covers a range of organisations and roles (Gammie and Joyce, 2009).

Ethics and professional values are crucial elements of professional knowledge but also some of the most contentious in how it is addressed in PAE (Ferguson *et al.*, 2011). As demonstrated in the provisions of IES 4, professional accountants must exercise professional scepticism, apply professional judgment, and act ethically per the public interest (IAESB, 2019). Almost all PABs have incorporated formal training on ethics in response to corporate failures and decades of accounting scandals (Allison, 2007). The integration of sustainability will likely materialise through the established PAE framework as most PABs have adopted a competency approach to professional training corresponding to the provisions of the IES (Apostolou and

Gammie, 2014; Paisey and Paisey, 2014). The chapter proceeds to examine the relationship between sustainability and accounting.

2.3 Sustainability and Accounting

Gray's (1992) work is often cited as the first attempt at linking accounting and sustainability, although discussions around accounting and sustainability had existed before this in the form of social and environmental accounting (Larrinaga and Bebbington, 2021). Gray (1992) critiqued prevailing accounting practices, policies, and education for being too narrow to comprehend the complete scope of social and environmental issues embodied in sustainability and advocated accounting for sustainability in the public interest. Ever since, there have been efforts to ensure that accounting becomes capable of seeing the nature of sustainability problems as absolutely crucial to the public interest and as such requiring urgent action (Gray and Bebbington, 2000; Gray and Collison, 2002; Nickell and Roberts, 2014; Christ and Burritt, 2016). Sustainability has developed into an exigent agenda for the accounting profession as Spencer (2020) opines that the accounting profession's core public interest obligation is best defined in notions of the common interests to deliver the common good, which today is epitomised in the SDGs.

The public interest rationale for sustainability could appear altruistic to some, mainly because the profession is perceived to prioritise its self-interest and client interest emanating from critical perspectives on professionalisation (Sikka, Willmott and Lowe, 1989; Lee, 1995). Besides the public interest motive, institutions in the accounting profession champion the business case for sustainability because organisations need accountants to support sustainability actions (Schaltegger and Burritt, 2010). Accounting and accountants seem suited to address sustainability within organisations, but it is debatable how much transformation can be created by accountants without a clear understanding of sustainability and possible modes of

engagement with accounting. This section aims to establish from the literature the connections between sustainability and accounting and its implication for PAE by examining the meaning of sustainability, the approaches and developments in sustainability accounting, and the role of accountants in sustainability.

2.3.1 Meaning of Sustainability

Although it is widely accepted that sustainability incorporates environmental, social, and economic pillars, there are different schools of thought about prioritising each aspect. Some argue that they should be linked, and others believe they are distinct, with many commonly understanding sustainability as a balance among these three areas (Purvis, Mao and Robinson, 2019). Sustainability and its other descriptor, sustainable development (SD), encapsulates the complex interconnectedness of environmental, social, and economic systems captured so that the environment is the basis for social justice and wellbeing, which conditions a thriving economy (Bebbington and Larrinaga, 2014). SD became mainstream through the Brundtland Report that defines it as: 'meeting the needs of the present without compromising the ability of future generations to meet their own needs' (UNWCED, 1987, p.8)[3]. Brundtland's definition allowed plurality, accommodated opposing ideologies, projected positive connotations, and promoted a consensus on global deliverable social, environmental and economic outcomes (Purvis, Mao and Robinson, 2019; Pazienza, De Jong and Schoenmaker, 2022).

Bebbington (2001, p.126) suggests that: 'sustainable development has a different meaning to different people in different contexts' so that the shape of the problem is characterised differently across locations and interests. In essence, SD is not about reaching a fixed universal definition but represents an open signifier and fluid characterisation of problems that can be

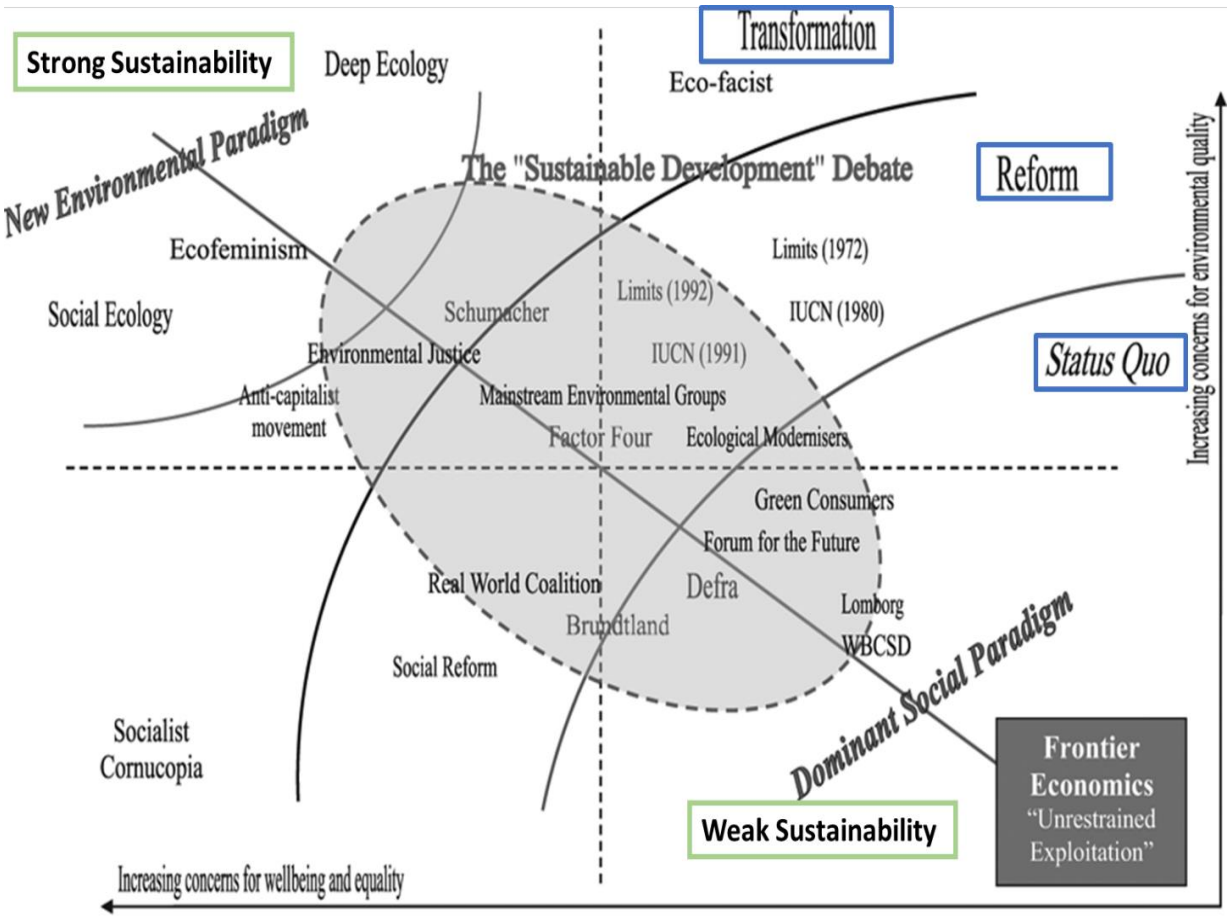
[3] UNWCED - United Nations World Commission on Environment and Development

tackled from various perspectives (Bebbington and Larrinaga, 2014). Yet, Gray (1992, 2010) expresses concerns on sustainability and SD arguing that it is an anthropocentric concept rooted in modernist ideals that political and economic elites captured for their intents. Elsewhere, Pazienza, De Jong and Schoenmaker (2022) presume that sustainability has a radical purpose that challenges the capitalist model to produce transformative changes. Another controversy emanates from using sustainability interchangeably with SD. On one hand, Gray (2010) and Byrch *et al.* (2015) view sustainability as an outcome and sustainable development as the process that may (or may not) create this outcome. Contrarily, Whyte and Lamberton (2020) view sustainability as the process and sustainable development as the outcome.

From the extant literature, the meanings of sustainability can be derived from a range of prioritisations, ideologies, and approaches to change (Hopwood, Mellor and O'Brien, 2005; Huckle and Sterling, 2016; Baker, Gray, and Schaltegger, 2023). Figure 2.2 below maps the different approaches to sustainability based on Hopwood, Mellor and O'Brien (2005), which distinguishes between strong and weak sustainability prioritisation, illustrates variations in worldviews[4], and characterises the different approaches to change labelled as transformation, reform, and status quo agenda for sustainability.

[4] Some of the underlying worldviews represented in figure 2.3 include deep ecology, social ecology, ecofeminism, eco-facist, ecological moderniser, and social reformist (Hopwood, Mellor, and O'Brien, 2005).

Figure 2.2: Mapping the sustainability debate



Source: From Milne *et al.* (2009, p.1226), adapted from Hopwood *et al.* (2005, p. 41)

A strong sustainability conception assumes that the nature and socio-economic issues are deeply connected, interdependent and complex (Bebbington, 2001; Gray, 2010; Gray, 2013), and it implies that ecological thresholds constrain socio-economic activities (Byrch *et al.*, 2007; Lankoski, 2016; Pazienza, De Jong and Schoenmaker, 2022; Baker, Gray and Schaltegger, 2023). A strong sustainability position unsettles economic development as a goal and seeks to define human socio-economic aspirations (Bebbington, 2001). Along those lines, Bebbington *et al.*'s (2019) characterisation of the Anthropocene reflects that the world is already in a different environmental paradigm; it is not only that ecological factors limit social-economic actions, but human activities have upturned how socio-ecological systems function. Hence, any

aspirations for sustainability must be reconceived in the paradigm of the Anthropocene since prior assumptions about the operations of socio-ecological systems are no longer viable (Bebbington *et al.*, 2019).

Meanwhile, Bebbington (2001) recognises the position of 'weak' sustainability as the acceptance of business as usual with some alterations to the present mode of economic development. Sustainability in the weak form accepts trade-offs between social, economic, and environmental aspects to maintain the established capitalist pattern of production and consumption (Lankoski, 2016; Pazienza, De Jong and Schoenmaker, 2022; Baker, Gray and Schaltegger, 2023); with economic concerns residing at the core (Bebbington, 2001; Byrch *et al.*, 2007). Indeed, Gray (2010) cautions against the dominance of weak sustainability conceptions because they appear easier to address within the dominant socio-economic paradigm. Whyte and Lamberton (2020) reinforce Gray's point that such domination is created through socio-cultural conditioning that predetermines human relationship with nature as distinct. Within the weak prioritisation, sustainability is only a means to an end in achieving some other more important goals or at best producing a utopian win-win outcome.

Also linked to sustainability prioritisations are considerations of the underlying worldviews discussed in the literature under three main ideologies: ecocentric, sustainacentric, and technocentric positions (Byrch *et al.*, 2007), as well as the various approach to change (Hopwood, Mellor and O'Brien, 2005). Byrch *et al.* (2007) established that an ecocentric ideology supports strong sustainability while the technocentric worldview readily aligns with a weak sustainability position. From Hopwood, Mellor and O'Brien's (2005) mapping of sustainability views (see figure 2.2), technocentrics accept the reality of sustainability but adopt accommodatory reactions to sustainability and espouse the application of information technology to solve social and environmental problems. Most experts, governments and

businesses stand within a technocentric worldview that is less committed to environment issues or social inequalities because they want to maintain the socio-economic status quo (Hopwood, Mellor and O'Brien, 2005; Gray, 2010; Whyte and Lamberton, 2020).

Opposition to this dominant worldview comes from the ecocentrics who have an environmentalist agenda to radically change conventional assumptions about nature and society (Gray, 1992). Hopwood, Mellor and O'Brien (2005) explain the ecocentric worldview as a transformative or revolutionary agenda in that they seek to overhaul the existing social and economic system. More recently, sustainacentrism has been proposed as a possible middle ground between technocentrism and ecocentrism emphasising human stewardship of nature to ensure survival and well-being (Whyte and Lamberton, 2020). Sustainacentrism and technocentricsm are grounded in similar anthropocentric notions of prioritising humanity but differ in that sustaincentric ideals reject the status quo and seek to reform existing systems. Hopwood, Mellor and O'Brien (2005) note that the reform approach acknowledges the enormity of sustainability issues and a change pathway that involves restructuring current political and economic systems.

The fundamental challenge with a middle-ground stance based on reformist strategies is the uncertainty about the extent of reform needed, how much of the old socio-economic system should remain and to what extent modifications can be introduced. Several studies have shown that it is possible to have a mixture of sustainability values and terminologies (Hopwood, Mellor and O'Brien 2005; Byrch *et al*., 2007; Whyte and Lamberton, 2020); for this reason, one cannot treat sustainability views as rigid demarcations but as overlapping positions. Some agree that the ambiguity of sustainable definition is necessary for plurality and localised action (Bebbington and Larrinaga, 2014; Byrch *et al.*, 2015; Lankoski, 2016), whereas others think that this limits meaningful action and implementation (Pazienza, De Jong and Schoenmaker,

2022). This thesis resonates with the views of Bebbington and Larrinaga (2014) that sustainable development is the closest semblance to an accepted definition that engages various parties, interests, and disciplines. Nonetheless, the divergent sustainability meanings have significant implications for accounting as it navigates changes in its policy, practice, and education.

2.3.2 Sustainability Accounting

Sustainability accounting is a broad endeavour to engage accounting in social and environmental issues through research, practice, and policy. Several notable efforts have been made to operationalise sustainability in business and accounting practice at various times. These include propositions on balancing the three sustainability pillars (3Ps- people, planet and profit) known as the Triple bottom line (TBL) (Elkington, 1994; Henriques and Richardson, 2013); the notion of creating shared value as the core purpose of a business (Porter and Kramer, 2011), and investor-driven proposition on environmental, social, and governance (ESG) risks (Van Duuren, Plantinga and Scholtens, 2016; Adams, 2017). These developments are usually associated with research from the managerialist school of thought that sees accounting as a part of the solution to sustainability on pragmatic grounds and engages with business in the process (Lamberton, 2005; Burritt and Schaltegger, 2010; Schaltegger, Lüdeke-Freund and Hansen, 2016; Hörisch, Wulfsberg and Schaltegger, 2020).

Business conceptions of sustainability are relevant because they resonate with managers and business professionals steering them to action (Schaltegger and Burritt, 2010; Baker, Gray and Schaltegger, 2023). At the same time, such a focus is not without drawbacks, as it runs the risk of misinterpretation and misapplication by companies. Previous studies show that organisations apply business conception of sustainability to support win-win thinking, modest changes, and continued perpetuation of capitalist models (Elkington, Emerson and Beloe, 2006; Gray, 2006; Crane *et al.*, 2014). Furthermore, the business case for sustainability has been criticised for

lacking ecological literacy, equating corporate sustainability with 'sustainability', and prioritising economic gains as the end goal (Gray, 2010; Milne and Gray, 2013; Tregidga, Kearins and Milne, 2013). Criticisms of the business-sustainability case primarily emanate from critical studies that have argued that conventional accounting in its current form is also a part of the problem and wants to devise a new socio-ecological basis of accounting different from the dominant capitalist paradigm (Maunders and Burritt, 1991; Gray, 1992; Gray and Bebbington, 2000; Hopwood, 2009; Tregidga, Kearins and Milne, 2013; Deegan, 2017).

Beyond the binary research divide, some offer a more inclusive operationalisation of sustainability by considering changes around common interest problems to demonstrate that transformative applications are possible through accounting (Bebbington and Larrinaga, 2014; Atkins *et al.*, 2015; Russell, Milne and Dey, 2017; Bebbington *et al.*, 2019). Such positions see the value of critiquing current socio-economic systems and that organisations should not be taken as the be-all and end-all for sustainability accounting; neither does it dismiss practicality that active solutions are an unequivocal part of producing transformative change for society. Notwithstanding the divergent streams of research, there is an agreement that the current trajectory are unsustainable, and research outcomes have generated awareness about sustainability and encouraged business and accounting to take sustainability seriously through the critique of structural issues, development of pragmatic tools, and collaborations with interested parties (Baker, Gray and Schaltegger, 2023).

With advancements in research, the initial aversion to sustainability accounting has turned to endorsement in mainstream accounting policy and practice (Cho *et al.*, 2020; Larrinaga and Bebbington, 2021). One evidence of mainstreaming is that Sustainability reporting, which began as voluntary corporate endeavours through frameworks such as the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and the International

Integrated Reporting Council (IIRC) for legitimacy reasons has given way to quasi-regulatory reporting regimes fuelled by stakeholders, academics, investors, and policy makers (Abela, 2022; de Villiers and Dimes, 2023). More recently, the International Accounting Standards Board (IASB) established the International Sustainability Standards Board (ISSB) from the merger of former sustainability standard setters to create harmonised sustainability standards (see Rowbottom, 2022), and the work of the European Financial Reporting Advisory Group (EFRAG) will further regularise and mandate sustainability reporting affecting a substantial number of companies (see Abela, 2022). Given the legislative backing and related demand for sustainability, the expansion of sustainability accounting will further prompt accountants in business and practice to seek relevant capacities and skills on sustainability.

2.3.3 Role of Accountants in Sustainability

With sustainability steadily becoming a part of organisational operations and obligations, the role of accountants in sustainability can be assessed from two viewpoints, accountants in business working in various organisation and accountants in practice who provide audit and consultancy services. Accountants in business have a role to play in sustainability because of their involvement in producing information, advising on business decisions, and guiding the generation and use of funds (Tilt, 2009; Schaltegger and Zvezdov, 2015; Egan and Tweedie, 2018; Ascani, Ciccola and Chiucchi, 2021). IFAC (2021) frames the accountant's role as ‘stewardship’ in considering how sustainability impacts the business model. Ascani, Ciccola and Chiucchi (2021) add that accountants can aid the diffusion of sustainability accounting and practices across an organisation. There are optimistic expectations about accountants’ role in sustainability, but the academic literature shows mixed results on their attitude and contribution to such practices.

Findings from the literature show that accountants can exhibit both patterns of resistance and adaptation in their involvement in sustainability improvements within organisations (Egan and Tweedie, 2018). While some accountants are completely uninterested as they employ defensive strategies to resist sustainability activities, others are partially or selectively involved in issues requiring traditional accounting competencies as an adaptive response (Zvezdov, Schaltegger and Bennett, 2010; Schaltegger and Zvezdov, 2015). Accountants naturally deploy their existing competencies to sustainability, but their engagement in this area has secured a distinct role for them as gatekeepers and facilitators of sustainability information and communication between different hierarchies and organisational teams (Mistry, Sharma and Low, 2014; Schaltegger and Zvezdov, 2015; Ascani, Ciccola and Chiucchi, 2021). Okwousa's (2020) recent study of Nigerian professional accountants establishes their willingness to be involved in sustainability issues revolved around traditional competencies in reporting and assurance.

Consecutively, accountants in practice became involved in sustainability assurance as companies sought to validate their sustainability reporting and disclosures to their stakeholders and external parties (Jones and Solomon, 2010), with large accounting firms readily adopting sustainability assurance into their portfolio of services (O'Dwyer, Owen and Unerman, 2011). Spence, Agyemang and Rinaldi (2012) study of small and medium accounting practitioners showed that they were offering their clients ad hoc and informal sustainability advice. The capacity of accountants to provide sustainability assurance and related advisory services is based on their expertise in corporate reporting audits, long-established robust audit procedures, and perceived professional independence (O'Dwyer, Owen and Unerman, 2011; Farooq and De Villiers, 2019; Channuntapipat, 2021). There is no consensus on the knowledge and competencies to conduct sustainability assurance (Farooq and De Villiers, 2019); in most cases, the team providing sustainability assurance is made up of qualified accountants and specialists

on sustainability matters such as environmental managers (Channuntapipat, Samsonova-Taddei and Turley, 2020).

The sustainability field in business and assurance practice involves jurisdictional contestation with allied and emergent sustainability occupations. Studies have shown that environment-related professions have greater responsibility for sustainability processes and reporting in organisations than accountants (Schaltegger and Zvezdov, 2015; Usmani, Davison and Napier, 2020). Similar contestations exist between accounting and non-accounting sustainability assurance providers (Taminiau and Heusinkveld, 2020; Channuntapipat, Samsonova-Taddei and Turley, 2019). The literature suggests that accountants are less likely to contribute to sustainability accounting because of their underdeveloped sustainability knowledge and competencies (Spence, Agyemang and Rinaldi, 2012; Schaltegger and Zvezdov, 2015; Egan and Tweedie, 2018; Ascani, Ciccola and Chiucchi, 2021). Sustainability could soon become a basic literacy requirement for accountants in business and practice as they need the expertise in this area to carry out existing functions and emerging roles. The next section evaluates the broad agenda on education for sustainability and studies on the integration of sustainability in accounting education.

2.4 Sustainability in Accounting Education

Education is seen as crucial to sustainability transitions because it can be a liberating force for change and emancipation. Education for Sustainable Development (ESD) was one of the initiatives that emerged in 2012 to champion sustainability literacy in various forms of education and learning across different levels (UNESCO, 2017). Different ideologies and prioritisations[5] influence action on sustainability education. One approach is an accommodatory

[5] See previous discussions of this in section 2.3.1 of this chapter.

response that involves fitting sustainability into the curriculum and content while neglecting the root causes of unsustainability (Sterling, 2004; Kopnina, 2012; Sterling and Hukcle, 2016). Whereas a constructivist approach focuses on a "reformatory*"* response in education systems that seeks a critical attitude to sustainability (Sterling, 2004, Sterling and Huckle, 2016). Several studies of sustainability in accounting education also propose a critical approach that promotes pluralism, independent mindset, and intellectual thinking (Thomson and Bebbington, 2004; Coulson and Thomson, 2006, Saravanamuthu, 2015; Brown and Dillard, 2019).

Much like the ESD literature, the accounting education literature has focused on university education rather than professional education. Integrating sustainability into accounting education has been driven by enthusiastic academics examining topics of curriculum, pedagogy, assessment, and student perception and performance while contemplating broader institutional agendas of universities on sustainability. The section reasons that the ESD literature has much to offer PAE beyond narrow considerations of content, teaching, and assessment through a competency-based approach, which is especially relevant since the accounting profession already adopts competency-based education as explained in the prior parts of the chapter. Equally, discussing findings from previous studies of sustainability in accounting education (including university education) is crucial to situating and justifying the research objective and approach.

2.4.1 Approach to Sustainability Education

The competency framework propositioned in the seminal work of Wiek, Withycombe and Redman (2011) informs the general approach to sustainability education. Competencies for sustainability involve a combination of knowledge, skills, and attributes that can be applied to complex sustainability problems (Barth *et al*., 2007; Wiek, Withycombe and Redman, 2011). Five key competencies have been identified as critical to sustainability efforts in academic and

professional education: systems-thinking competence, anticipatory competence, normative competence, strategic competence, and interpersonal competence (Wiek, Withycombe and Redman, 2011). The aim of identifying key competencies is to design learning structures, processes and components that enable the development of these competencies (Barth *et al.*, 2007; Wiek, Withycombe and Redman, 2011).

UNESCO (2017) describes systems thinking competence as the ability to identify and understand the interconnected elements of complex systems within different settings and scales. Systems thinking competence recognises the coupling of sustainability aspects (environment, social, and economic) and the variations in temporal and spatial dimensions in holistically analysing the nature of sustainability problems (De Haan, 2006; Wiek, Withycombe and Redman, 2011; Redman and Wiek, 2021). These skills form the prerequisite for applying anticipatory competence which refers to the ability to imagine and assess multiple futures for sustainability: possible, probable, and desirable (UNESCO, 2017). Anticipatory competence, also known as futures-thinking, is required for sustainability because the long-term orientation of the sustainability agenda involves a multigenerational perspective (Wiek, Withycombe and Redman, 2011; Redman and Wiek, 2021). Systems thinking and anticipatory competences depend on learners' cognitive skills and intellectual abilities. Wiek, Withycombe, and Redman, (2011) relate both competencies as essential for creating transition strategies and preparing and adapting for several future possibilities.

Normative competence considers the ability to reflect, utilise, and negotiate values and principles that underpin sustainability action amidst conflicting interests (Wiek, Withycombe and Redman, 2011; UNESCO, 2017). In this way, normative competence forms the ethical and moral compass for making decisions regarding the relations of nature and humanity, including concepts of integrity, justice, responsibility and accountability. De Haan's (2010) competency

model for ESD describes the features of normative competence to include; reflecting personal values, equity in decisions and actions, and the ability to show empathy and solidarity for the marginalised. All the other competences discussed so far are relevant to planning actions and outcomes, whereas strategic competence reflects the ability to map and implement innovative transitions and governance plans collectively towards sustainability at all levels (Wiek, Withycombe and Redman, 2011). De Haan (2006) further explains strategic competence in developing timelines for implementing goals and actions.

In linking these competencies, Wiek, Withycombe and Redman (2011) assert that normative competency is relevant in creating an ideology of sustainable change, while strategic competency tactically combines the application of the previous three competencies. Normative competence can reflect moral thinking; however, it takes motivated action exhibited through strategic competence for transformation to become evident. Lastly, the framework requires interpersonal competence, described as the ability to learn from others, interact effectively with others from diverse backgrounds, and collaborate to solve problems (De Haan, 2010; Wiek Withycombe and Redman, 2011; UNESCO, 2017). Wiek, Withycombe and Redman (2011) connect interpersonal competence to all the other competencies as sustainability requires interdisciplinarity and collaborative approaches.

Some limitations of the key sustainability competencies framework include the lack of theoretical justification, empirical evidence, and challenges in operationalising them within education programmes (Wiek, Withycombe and Redman 2011). The limitations have not dissuaded its widespread application in the programme development of various disciplines towards sustainability (Brundiers, Wiek and Redman, 2010) with empirical evidence of how these competencies are implemented and assessed in an education setting (Redman, Wiek, and Barth, 2021). For practical application, it is important to note that the competency descriptors

in Wiek, Withycombe and Redman (2011) should engage with technical knowledge in each discipline and the generic competencies already established in each profession (Redman and Wiek, 2021). Every discipline including accounting has pre-defined knowledge and competencies that has a bearing with sustainability.

2.4.2 Sustainability in Accounting Education

Although research on sustainability in accounting education mostly addresses university degree programmes and rarely professional education, it is still valuable to explore this literature to position this thesis in these discussions of how accountants become sustainability literate and competent. Historically, sustainability was a peripheral element in the accounting curriculum, given that the pressure to include content from other knowledge areas within the already overcrowded accounting curriculum hinders the demand for its inclusion (Stevenson, 2002; Stevenson and Thomson, 2010; Gray, 2019). Thus, efforts to include social and environmental elements in accounting education began through enterprising accounting academics with a research interest in this area (Bebbington, 1997; Mathews, 2001b; Thomson and Bebbington, 2004; Mangion, 2006; Coulson and Thomson, 2006; Gray, 2013; Collison, Ferguson and Stevenson, 2014). Their goal was to facilitate students' understanding of the limitations of conventional accounting, create awareness of social and environmental issues, and enable critical and ethical thinking using various pedagogic approaches[6].

Several studies have documented the positive effects of sustainability education on students, with most prioritising social and environmental issues, questioning capitalism, and developing independent value systems (Chulián, 2011; Gray, 2013; Schaltegger, 2013; Wynder, 2013; Wynder, Wellner and Reinhard, 2013; Saravanamuthu, 2015; Sharma and Stewart, 2022).

[6] Pedagogic approaches include transformative learning and dialogic learning (Gray, 2019)

Notwithstanding, factors such as student expectations of and orientation to the accounting discipline, resistance from other academics, and accreditation requirements of PABs pose hindrances to integrating sustainability into accounting education (Gray and Collison, 2002; Hazelton and Haigh, 2010; Khan, 2013; Mburayi and Wall, 2018; Collison, Ferguson and Stevenson, 2014). Therefore, educators must consider both the pragmatic expectation and the normative imperative for sustainability education in designing accounting programmes (Matthew, 2001; Hazelton and Haigh, 2010). With sustainability courses becoming more common in degree programmes, significant variation still exists in the level of integration among educators and institutions.

Mburayi and Wall (2018) synthesise the various approaches to sustainability integration in accounting education from prior studies, which include:

I. Piggybacking by adding a sustainability content into the existing curricula
II. Deep digging by designing a discipline curriculum on sustainability
III. Mainstreaming by blending sustainability into common core curricula
IV. Focussing on sustainability through a cross-disciplinary curricula
V. A holistic approach that includes various elements in the other four approaches.

Their study showed that piggybacking and deep digging were the most common approach to sustainability integration within accounting and finance programmes (Mburayi and Wall, 2018), which is consistent with other research findings that sustainability is taught as a topic(s) in existing modules or a standalone optional sustainability module is created (Stevenson, 2002; Mangion, 2006; Cho *et al.*, 2020; Gray, 2013; Stevenson and Thomson, 2010; Russell *et al.*, 2021). Mainstreaming in every module or focussing using a compulsory interdisciplinary module is rarely adopted since such approaches require significant institutional commitment, resources, and expertise on sustainability among educators (Mburayi and Wall, 2018). There

are concerns that typical approaches to sustainability in accounting education are less effective and do not challenge the status quo of the accounting knowledge framework (Collison, Ferguson and Stevenson, 2014; Mburayi and Wall, 2018; Gray, 2019). Thus, Gray (2019) suggests that sustainability must become definitive in every aspect of the mainstream accounting programme to have the intended transformational effects.

Professional interests have also affected sustainability accounting education. For example, Sharma and Stewart (2021) found that normative pressures from PABs drives integrating sustainability in the accounting curriculum. Sustainability has been featured as an emerging topic in the curriculum of PABs (Kamp-Roelands, 2013; Paisey and Paisey, 2014). Like university education, UK PABs approach sustainability in professional training by embedding it in the existing core curricula rather than introducing a stand-alone subject (Paisey and Paisey, 2014). Owen (2013) offers some insights into how the ACCA incorporates sustainability principles into its curriculum design (including content and assessment), especially in ethics, performance management, and corporate reporting. Likewise, Boulianne and Keddie (2018) indicate that sustainability is part of professional training in their review of IFAC education standards, specifically in IES 2 and IES 4.

On the basis of the evidence presented above, it is clear that sustainability is no longer a negligible part of PAE as PABs have expanded their coverage of sustainability matters as evidence in their current curriculum and assessment processes (Bebbington, Larrinaga and Thomson, 2021). Yet, it is difficult to assess the scope and depth of sustainability knowledge and competencies in PAE since the practice amongst PAB on sustainability education is far from uniform (Paisey and Paisey, 2014; Bebbington, Larrinaga and Thomson, 2021). The Canadian CPA curriculum content and competency map, for example, shows no inclusion of sustainability matters (Boulianne and Keddie, 2018), while the French accounting profession

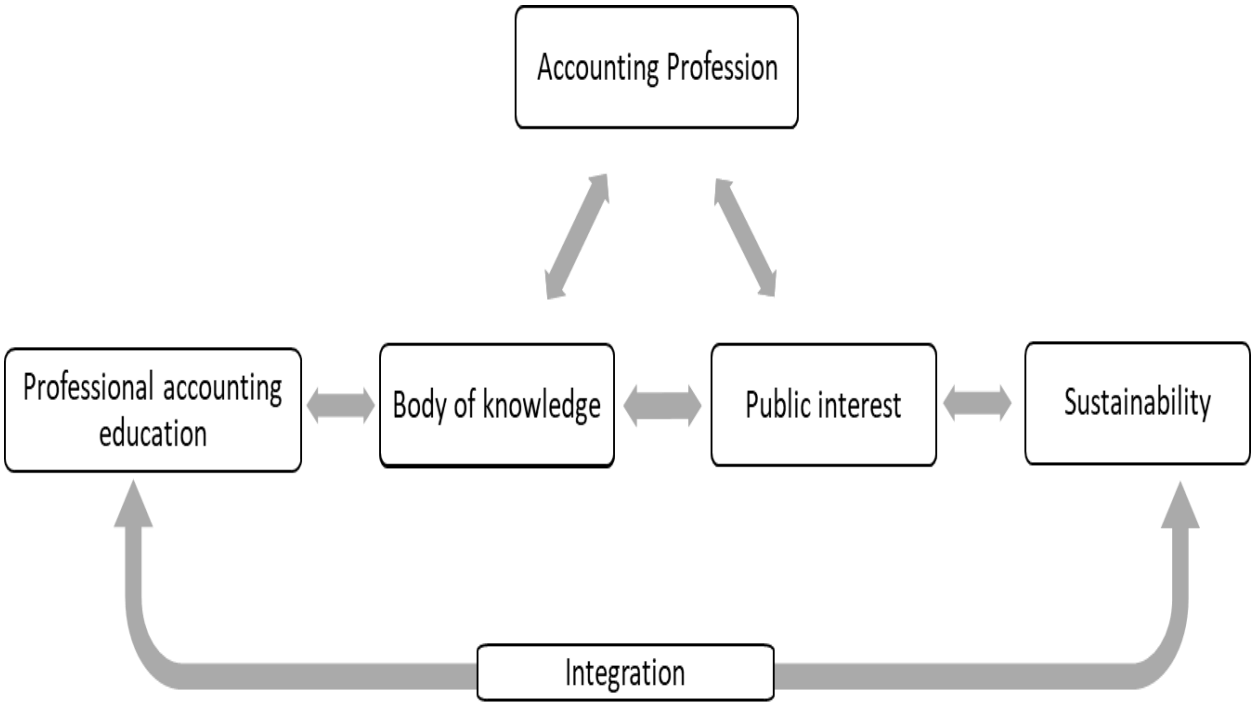
operationalises sustainability as a niche area that can be studied by professional accountants but is not a generic competence offered through professional training (Boulianne, Keddie and Postaire, 2018). Such variations in sustainability integration show that sustainability knowledge in PAE is not consistently present or enacted.

Professional training is the central pathway for an individual to become an accountant regardless of their prior educational experiences. Not all accountants are mandated to possess relevant degrees (Gray and Collison, 2002; Paisey and Paisey, 2014), and not all accounting graduates entering into professional training have come across sustainability (Kelly, 2009; Botes, Low and Chapman, 2014; Gray, 2019). The paucity of research on sustainability in PAE limits the possible changes that would enable accountants across the board to become sustainability literate.

2.5 Summary and Gaps in the Literature

This chapter reviewed the literature on three core areas; the accounting profession, accounting education, and sustainability, which Gray and Collison (2002) argue are fundamentally interconnected to how sustainability becomes central to PAE. Figure 2.3 below extends the conceptual framework of accounting as a profession depicted earlier in figure 2.1 to demonstrate the gap in the literature that informs the basis for this thesis:

Figure 2.3: Extended conceptual framing of the accounting profession, PAE and sustainability



Source: author's depiction

Extant literature on the accounting profession suggests that professionalisation is a process embedded in a history and context created by certain socio-economic conditions and the strategic intent of accountants (Richardson, 2017). Since its emergence, the accounting profession has adapted to the premise of each era (such as colonisation and globalisation), while retaining its claims of possessing a specialised body of knowledge and serving the public interest. The professionalisation literature offers a founding conceptualisation of how the accounting profession seeks to expand and defend its expertise and jurisdiction, but often focused on historic events and occurrences. This does not fully engage with these grand themes of the past, it focuses on future developments of the accounting profession in seeking to adapt its founding premise and knowledge systems in the wake sustainable development.

Accounting knowledge claims also rely on legitimacy derived from its connections with adjoining institutions such as the State, clients, and other professions in the professionalisation

process. One key attribute of professional knowledge is that clients and the public can trust the competencies of accountants facilitated through the profession's education process (Paisey and Paisey, 2014). An exploration of the structure of accounting education shows that there is no universal approach, as each country operates different training arrangements due to country-specific factors (Calhoun and Karreman, 2014; Needles, 2014). Following decades of criticism of the deficiencies in accounting education (Flood, 2014; Boyce *et al.*, 2019), the prevailing practice exemplified in IFAC's IES. The standards prescribe a competency-based approach reiterating that the profession recognises the needs of various stakeholders and its public interest obligation of producing knowledgeable, skilled, and competent accountants. While this literature has provided ample debates on the purpose and direction of PAE reforms (Flood, 2014), it has yet to establish how much of PAE reforms is channelled through the needs and interests of various stakeholders in the profession.

Exploring the connection between sustainability and accounting requires a deeper probe into the meaning of sustainability since several philosophies and value systems underpin the concept (Hopwood, Mellor and O'Brien, 2005). Sustainability comprises environmental, social, and economic components in complex interactions, but a universal definition of sustainability is deemed unattainable due to differences in prioritisations, worldviews, and approaches to change. Sustainability is often used interchangeably with SD, which portrays an open signifier that bridges the gap amongst various positions and steers action across levels and disciplines (Bebbington and Larrinaga, 2014). The relationship between accounting and sustainability was not always fully elaborated before Gray (1992); but extensive research since Gray's work has justified the connections between accounting and sustainability (Larrinaga and Bebbington, 2021). While the accounting profession can now firmly relate its public interest obligation to sustainability and the SDGs (Spencer, 2019), there are still debates in the sustainability

accounting literature on how accounting and accountant should approach sustainability (Baker, Gray and Schaltegger, 2023).

Philosophical positions and values are at the crux of divisions in the field of sustainability accounting practice and research. Managerialist research reprises pragmatic solutions that are possible through accounting and the engagement of sustainability with business, often producing business sustainability conceptions and tools that aid managers and accountants to act; whereas critical scholars argue that such an approach does not understand nor address the depth and gravity of sustainability issues advocating to break open current accountings completely (Gray and Collison, 2002; Baker, Gray and Schaltegger, 2023). Equally relevant is that accountants in business have carved out a gatekeeping role in sustainability practices in organisations, and accountants in practice have embraced sustainability assurance into their portfolio of services (Jones and Solomon, 2010; Schaltegger and Zvezdov, 2015). Yet, the crucial limitation to accountants' involvement and role in sustainability is their limited literacy and expertise and there is a general lack of consensus on the approach to PAE that would help accountants fill this gap.

Having established from the various strands of the literature discussed above that the accounting profession seeks to serve the public interest by upholding an intellectual body of knowledge disseminated through PAE, and that sustainability is connected to its public interest obligations, this thesis reveals a crucial gap as to why these connections are often absent or relegated in making a case for integrating sustainability into PAE. Holistic integration of sustainability can only be made possible through an understanding of the conceptual premise and arguments that underpin the intent and mechanisms for integrating sustainability into PAE. As sustainability becomes central to the accounting profession especially in the areas of accounting practice, policy and research, there will be greater pressure and urgency for sustainability education. The

pathway for this to be achieved is unclear; although PABs now include sustainability material in their training, the scope and extent of integration vary significantly (Paisey and Paisey, 2014; Boulianne and Keddie, 2018).

Holistic reforms through education can only be possible if the underlying systems are also transformed (Kemmis and Mutton, 2012; Boyce *et al.*, 2019). The current gaps in the literature as discussed in this chapter justify the study's aims to investigate the contextual factors, mechanisms, approaches, and implications for educating accountants about sustainability and advancing changes in PAE. The next chapter articulates the avenue for investigating these questions by presenting the theoretical framework of the thesis based on CAS and Institutional theories as well as discussing their mode of application and explanatory tools to tackle the research objectives. These theories are useful for investigating the processes and mechanisms that often predate any materialisation of sustainability matters in PAE which has consequences on the education process.

CHAPTER 3: INSTITUTIONAL CHANGE IN A COMPLEX ADAPTIVE SYSTEM

3.0 Introduction

The previous chapter identified knowledge gaps in the literature focused on embedding sustainability in accounting more broadly (and PAE in particular). The literature review highlighted that the structural processes and implications of sustainability for educating accountants are yet to be fully addressed. To start the process of addressing this gap, this chapter presents the theoretical framework that will be used in this thesis to suggest and assess the pathways, mechanisms, and contextual issues that arise for integrating sustainability into PAE. The chapter uses a synthesis of Complex Adaptive Systems (CAS) and neo-institutional theories to undertake this task. Such theoretical synthesis is founded in a triangulation strategy whereby multiple theories are concurrently deployed to study the same phenomenon so as to capture the multifaceted dimensions of the research questions and enhance the empirical insights from the research (Hopper and Hoque, 2018; Hoque, Covaleski and Gooneratne, 2013; Burau and Andersen, 2014).

It is crucial to outline the purpose of selected theories, their association, and the value of combining them into develop a theoretical framing (Burau and Andersen, 2014). Institutional theory and CAS perspective have been applied to study professions and other social processes, although they are often used to analyse different scales and change patterns. Systems conceptualisation recognises that professions are nested within systems of influence that includes other professions and interdependent institutions (Abbott, 1988; 2005). Such system models originate from natural sciences and prioritise the interrelations between whole and parts, with CAS theory being a branch that defines the adaptive qualities in self-organising entities that produce unpredictable outcomes through complex interactions (Dooley, 1997). CAS and related systems thinking notions have been applied to studying social and organisational

systems as analogies or metaphors to understand change processes (Lee, 1990; Peltoniemi and Vuori, 2004; Palmberg, 2009; Phillips and Ritala, 2019). Thus, the CAS approach is used to explore the diverse influences in the institutional environment, patterns of co-evolution, and leverage points to facilitate sustainability literacy and competencies.

An alternate perspective to professions is that they are a type of institutional field comprising a focal group and their interaction partners, and professionalisation is a variant of institutionalisation shaped by agency and power relations of multiple actors (Scott, 2008; Muzio, Brock and Suddaby, 2013). The notion of fields is at the core of institutional theory, which refers to cluster organisations or groups engaging in a collective meaning-making system (Wooten, 2008). The institutional approach maps both the exogenous and endogenous aspects of change with special attention to the power dynamics and agency work to sustain and transform the professional field, which justifies its use in theorising how the accounting professional seeks to integrate sustainability into PAE.

This chapter identifies the overlaps in Institutional and CAS theories to construct an intermediating theoretical framework that offers a multi-layered explanation of the research phenomenon. The rest of the chapter is divided into four sections. Section 3.1 explores the proposition of CAS theory, including its central features, nature of change, and perspective on PAE. Section 3.2 examines institutional fields and discusses the drivers of change, the role of agency and power, and the patterns of change. Section 3.3 discusses the implication of theoretical triangulation and the constructed theoretical framing; the chapter concludes with a summary in section 3.4.

3.1 Complex Adaptive System (CAS)

The concept of systems is found in biology, physics, engineering, ecology, sustainability science, economy, politics, and culture. A system is an entity composed of multiple connected

elements with a distinguishing boundary from its environment (Ford, 2008; Boardman and Sauser, 2013). All systems consist of elements, interconnections, and collective functioning to produce effects (Kim and Mackey, 2014), but a CAS proposes a non-linear path of cause and effect within a system (Chaffee and McNeill, 2007; Preiser *et al.*, 2018). A CAS is a category of systems notable for their complex, dynamic, and adaptive traits (Kim and Mackey, 2014). Complexity refers to the diversity of agents, interactions, and interdependencies within the system, which cannot be understood or predicted simply by the activities of individual agents (Ford, 2008; Ellis and Herbert, 2010; Folke, 2019). Adaptability is demonstrated by an evolving system structure that seeks to change and reorganise in response to the environment based on experience (Holland, 1992; Ford, 2008).

Prior research on non-linear systems led to discoveries in physical sciences about the complexity within simple systems; natural sciences found alternative explanations of biological order apart from natural selection, and the social sciences have focused on emergence from local interactions that create complex global patterns (Lansing, 2003). The application of CAS theory makes possible theoretical investigations of adaptive patterns and complex properties in diverse subjects of interest, which has significantly benefited multidisciplinary and interdisciplinary thought and research. The following discussions will address the features of a CAS, nature of CAS change, and application to PAE.

3.1.1 CAS Features

While several CAS definitions suggest a unified foundation, the characteristics of a CAS have been described from different perspectives and disciplines (Preiser *et al.*, 2018). The list of CAS features derived from the literature in different fields is shown in Table 3.2 below:

Table 3.2: Features of a CAS

Author/Year	Features	Field of Study
Holland (1992)	Evolving structure, Aggregate behaviour, Emergent properties, Anticipation, Open structure, Building blocks, History & contexts, and Internal models	Multidisciplinary Computation & Modelling
Gell-Mann (1994)	System inputs & non-linear effects, Regularities, Schema, and Feedback mechanism.	Multidisciplinary, Computation & Modelling
Dooley (1997)	Self-organisation, Emergence, Schema, and Aggregation.	Organisation Change
Chiva-Gómez (2003)	Heterogenous agents, Diversity, Schema, Self-organisation, Evolution, and Learning.	Organisation & Management
Peltoniemi and Vuori (2004)	Self-organisation, Emergence, Co-evolution, and Adaptation.	Business Ecosystems
Chaffee and McNeill (2007)	Adaptable elements, Attractors, Co-evolution, Context and embeddedness, Emergent behaviour, Inherent order, Non-linearity, Porous boundaries, Self-organization, and Unpredictability.	Nursing
Palmberg (2009)	Interdependent agents, Distributed control, Emergence, Self-organisation, Adaptability, Non-predictability, Non-linearity, and Co-evolution.	Organisation & Management
Preiser *et al.* (2018)	Relational, Adaptive capacities, Dynamic processes, Open systems, and Emergence.	Socio-ecological systems, sustainability
Phillips and Ritala (2019)	Self-Organisation, Hierarchy, Emergence, and Learning.	Business Ecosystems

From Table 3.2 above, the features of a CAS can be further characterised into a description of its structure, behaviour, and outcomes. The structure of a CAS incorporates heterogeneous agents (Chiva-Gómez, 2003), arranged to form a hierarchy (Eidelson, 1997; Phillips and Ritala, 2019), with an open form that connects with other systems (Holland, 1992; Preiser *et al.*, 2018).

Agents are semi-autonomous units representing the building block of a CAS functioning to maximise some measure of goodness or fitness, by evolving based on experience (Dooley, 1997; Chiva-Gómez, 2003). These agents can be human, organic entities such as cells; they may be non-living, intangible, or symbolic such as an organisation, institution, or initiative (Rhodes and MacKechnie, 2003; Chaffee and McNeill, 2007; Porter and Derry, 2012). The agents in a CAS have an extensive effect because of their interconnections within the system; their roles can also change as the CAS evolves and the environment transforms (Chaffee and McNeill, 2007; Rhodes and MacKechnie, 2003). The heterogeneity of agents refers to their variety and diversity, which improves their potential to adapt and evolve (Chiva-Gómez, 2003; Chaffee and McNeill, 2007; Ford, 2008).

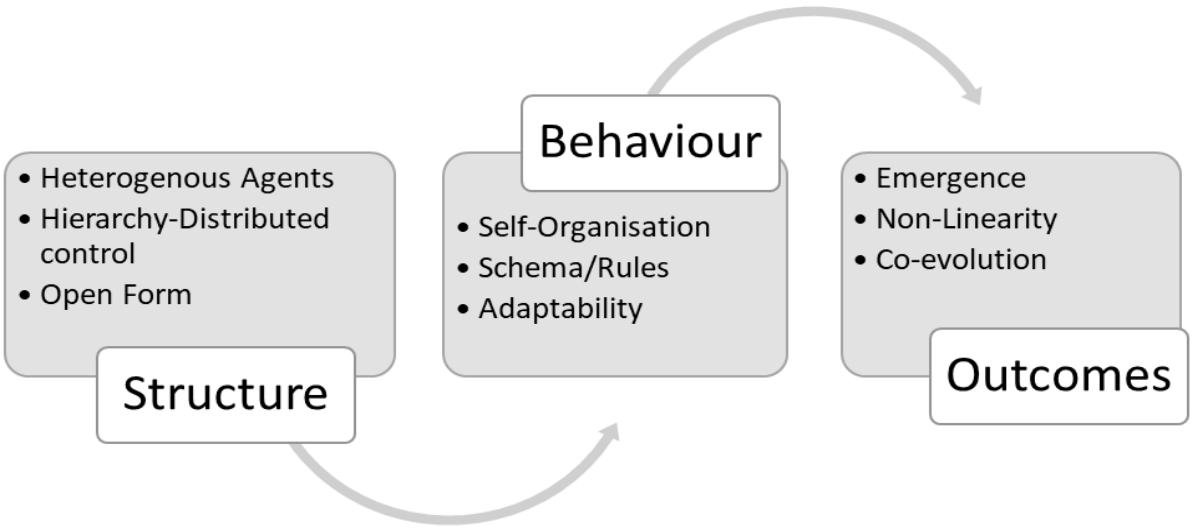
To establish order in the system, diverse agents arrange to form a hierarchy, with some agents operating at higher, lower, or the same levels (Phillips and Ritala, 2019). This hierarchical arrangement does not necessarily mean the superiority of some agents exercising centralised control; instead, these agents and meta-agents exhibit distributed control over system functions (Eidelson, 1997; Chaffee and McNeill, 2007). Hierarchy provides an organising structure to systems and helps define agents' relations. In the structure of a CAS, Eidelson (1997) indicates that intracomponent linkages are usually stronger than intercomponent linkages, and nearby agents have stronger connections than distant agents. Since a CAS resides and interacts within a context and environment, open boundaries allow exchange and movement between the system and the environment (Chaffee and McNeill, 2007; Preiser *et al.*, 2018). Holland (2006) discusses this openness in enabling parallel signals to be sent and received among the numerous agents and with the environment. The vital open structure uses the porous boundaries of the elements in a CAS to assist multiple simultaneous interactions needed for the system to adapt and evolve.

The complex dynamic connection in a CAS uses webs of interactions to move information and resources from neighbouring units and the external environment (Eidelson, 1997; Ford, 2008). Information is processed based on local internal rules to formulate responses transmitted through feedback loops (Eidelson, 1997). The meeting point of several interconnections called nodes is used for processing and transforming the nature and direction of a flow, as well as its structure (Ford, 2008). Therefore, the behaviour of the system is determined by the choices of the agents in their exogenous (external) or endogenous (internal) interactions (Rhodes and MacKechnie, 2003). Agent interactions are based on simple and deterministic rules, also called schemata/schema (Kim and Mackey, 2014; Rhodes and MacKechnie, 2003); these interactions are complex because of how these rules are implemented through a series of iterations. These interconnections are important because they allow both adaptive actions and emergent outcomes.

Since a CAS has a decentralised control structure, each interacting part is governed by its own rules (schema), with each participating and competing to influence an outcome; while also influencing the actions of other parts (Holland, 1992; Gell-Mann, 1994; Dooley, 1997). A schema is a set of interpretive rules or responses that reflect regularities in experience or a cognitive structure that determines models of evolution (Gell-Mann, 1994; Chiva-Gómez, 2003). Ford (2008) uses internal mental models in place of schema to explain historic and experiential knowledge that CAS possesses. A CAS can use these schemas/internal models to approach current actions but also to anticipate their outcomes and future trajectories. Schemas act as building blocks adapted to handle novel situations rather than distinct rules for each possible situation (Holland, 2006). These schemas are also useful for separating between aggregate subunits of agents (Dooley, 1997), through a process of tagging or labelling that helps agents self-reflect on individual and collective behaviour (Ford, 2008).

Gell-Mann (1994) theorised the CAS experience as a combination of system behaviours (input) and outcomes (output). Agents' interactions and the feedback process lead to emergent patterns and co-evolution (Holland, 1992; Folke, 2019; Carmichael and Hadžikadić, 2019). Emergence refers to a new form of behaviour and innovation (Folke, 2019), and co-evolution occurs when there are concurrent changes in the CAS and the environment through the balance of tension and stability (Chaffee and McNeill, 2007). Non-linearity is the core mechanism by which CAS produces outcomes such that small adjustments can cause enormous, multiple, and unexpected changes (Chiva-Gómez, 2003; Chaffee and McNeill, 2007; Preiser *et al.*, 2018). These CAS outcomes are reflected over time since they describe the complex interactive property of agents from one hierarchy to another. The cumulative effects of a CAS are greater than the sum of its elements, making the trajectory of change unpredictable. Figure 3.4 below presents a summarised understanding of CAS based on the features identified from the literature to assist its application in this thesis.

Figure 3.4: Summary of CAS features



Source: author's depiction based on the literature

Scholars writing about professions such as nursing, medicine, and engineering have used the CAS approach to holistically analyse problems (Gell-Mann, 1994; Chaffee and McNeill, 2007; Woodruff, 2019). Applying the CAS approach to professions aids the visualisation of components and connections to build new approaches for practice, research, education, and policy (Chaffee and McNeill, 2007). Accounting knowledge and expertise are co-created through the activities of various agents and shaped by the complex adaptive traits observable at the aggregate system level. The summarised characteristics of CAS presented in Figure 3.2 above are applied to describe the accounting profession as a CAS in Table 3.3 below:

Table 3.3: The accounting profession as a CAS

S/N	CAS Features	The Accounting Profession
1.	Heterogeneous Agents	Diverse agents including accounting practitioners, accounting academia, professional accounting bodies, accounting standard setters, accounting firms, and international professional institutions.
2.	Hierarchy-distributed Control	Agents can operate at national, regional, and global levels and exhibit different forms of influence within its functional domains.
3.	Open form	Agents actively interact with surrounding institutions such as regulators, business organisations, government, and inter-governmental institutions.
4.	Self-Organisation	Agents have the capability to form new networks, innovative ideas, and patterns that promotes system change.
5.	Schema/Rules	Professional accounting is guided by expectation and rules of competence, professional behaviour, and ethics.
6.	Adaptability	Professional accounting has adapted overtime to meet the needs of its environment or to improve the internal fitness of the system.
7.	Emergence	Professional accounting develops new models of behaviour or actions which emerges at the points of crisis and scandals through the activities of diverse agents
8.	Non-Linearity	System change process occurs through feedback between professional accounting and the environment and by corresponding influence of the environment on professional accounting.

9.	Co-evolution	The system constantly evolves alongside its environment because of the interactions of agents in the system and with the environment.

Source: author's compilation based on the CAS literature

A CAS conception construes the agents in the accounting profession as diverse, including PABs, accounting practitioners, accounting academia, accounting standard setters, accounting firms, and international professional institutions (Burrage, Jarausch and Siegrist, 1990; Lee, 1990). Hierarchy comes from the agent's positioning at organisational, local, national, regional, and global levels and their distributed influence over system functions (Faulconbridge and Muzio, 2012). For instance, accounting practitioners constitute PABs, and PABs aggregate to form transnational coalitions such as the International Federation of Accountants (IFAC). Positioning in a CAS also matters because agents closer together have a stronger connection than agents far off (Eidelson, 1997), for instance, the proximity between accounting academia, students, and universities in the education function is closer than other possible interactions. Hierarchy in a CAS does not suggest the supremacy of some agents over others but serves as a means to define the relationships of agents and meta-agents in the CAS (Eidelson, 1997; Chaffee and McNeill, 2007).

The professional accounting system interacts with other systems within its environment (Lee, 1990; Abbott, 2005) since its open form facilitates exchanges with others such as the clients, the State, employers, universities (educators), and other adjoining professions. Also, openness allows feedback flow between the professional accounting system and the environment, and amongst its elements (Preiser et al., 2018). Self-organisation and adaptability in accounting are evident in forming new professional networks, new norms, and rules of behaviour (Lee, 1990; Suddaby, Cooper and Greenwood, 2007; Leicht and Fennell, 2008). Networks in professional

accounting continue to expand as they provide avenues for supportive action on issues affecting the profession (Faulconbridge and Muzio, 2012).

In addition, the schema in accounting comes from the underlying premise of competence, professional behaviour, and ethics that is common to the profession and understood by other actors in the system (Lawrence, 1999; Scott, 2008). Professional schemas are adapted to meet the needs of the environment or improve the system's internal fitness. The professional accounting system and activities have increased in complexity evolving from individuals to groups of individuals, to firms, with a consistent pattern of change that the profession adapts to environmental changes while retaining its core purpose or main characteristics, evidencing resilience and evolution (Lee, 1990). Thus, accounting exhibits co-evolution and emergence in response to environmental pressures. Considering professional accounting as a CAS offers the possibility of understanding the patterns of change in a broader context.

3.1.2 Nature of CAS Change

Holland (1992) considers the nature of change in a CAS to be a constantly moving target making it unpredictable and challenging to control, but history and context play a significant role in CAS changes. A CAS evolves based on history, given that its current state is shaped and influenced by memory and the capacity to learn from past responses and configurations (Chaffee and McNeill, 2007; Preiser *et al.*, 2018). The schema agents develop in a CAS originates from historical and experiential knowledge (Ford, 2008), which enables them to achieve fitness (Holland, 2006). Context also determines the nature of CAS change since the CAS resides within and interacts with other systems that influence it (Chaffee and McNeill, 2007; Preiser *et al.*, 2018). While one cannot predict CAS changes, history and context reveal the path dependency and anticipation of CAS changes based on the vision of emergence (Folke,

2019). Therefore, patterns within CAS complexity help to describe its evolution process (Dooley 1997).

Mapping feedback mechanisms allows the recognition of these system patterns since feedback loops can amplify or dampen system behaviour, including self-organising and adaptive capabilities (Eidelson, 1997; Preiser *et al.*, 2018). Feedback loops can be negative and positive in a system; positive feedback encourages the system to reinforce current behaviours, while a negative feedback loop signals the system to correct its actions (Meadows, 1999). A CAS operates through positive feedback that is self-reinforcing and negative feedback that is self-correcting such that immediate outcomes can have future long-lasting effects (Meadows, 1999; Clancy 2005). Dooley (1997) provides an overview of the three pathways of change that confronts a CAS based on system capabilities. First-order change (single-loop learning) includes actions taken to adapt existing schema to signals as agents get better at what they do, while second-order change (double-loop learning) occurs when there is a purposeful change in the schema to improve fitness as agents change what they do (Dooley, 1997, Chiva-Gomez, 2003).

Eidelson (1997) suggests that the first two levels of change usually cause adaptation of internal models and co-evolution that aim to achieve the respective fitness peaks of agents. The first and second-order changes are more prominent in organisational systems (Dooley, 1997). The third type of change happens when a schema survives or dies because of the Darwinian survival or death of its corresponding CAS (Dooley, 1997; Chiva-gomez, 2003). The ability to withstand competition where unfit properties are discarded, and new properties replace old ones determines the survival or death of a CAS (Eidelson, 1997). The pattern of change is evolutionary when there is a continuity of the old system elements alongside emergent properties (Kim, 2005). A CAS is configured for potential change and adaptation either through

alteration of its rules, connections, and responses or through modification of the external environment (Eidelson, 1997).

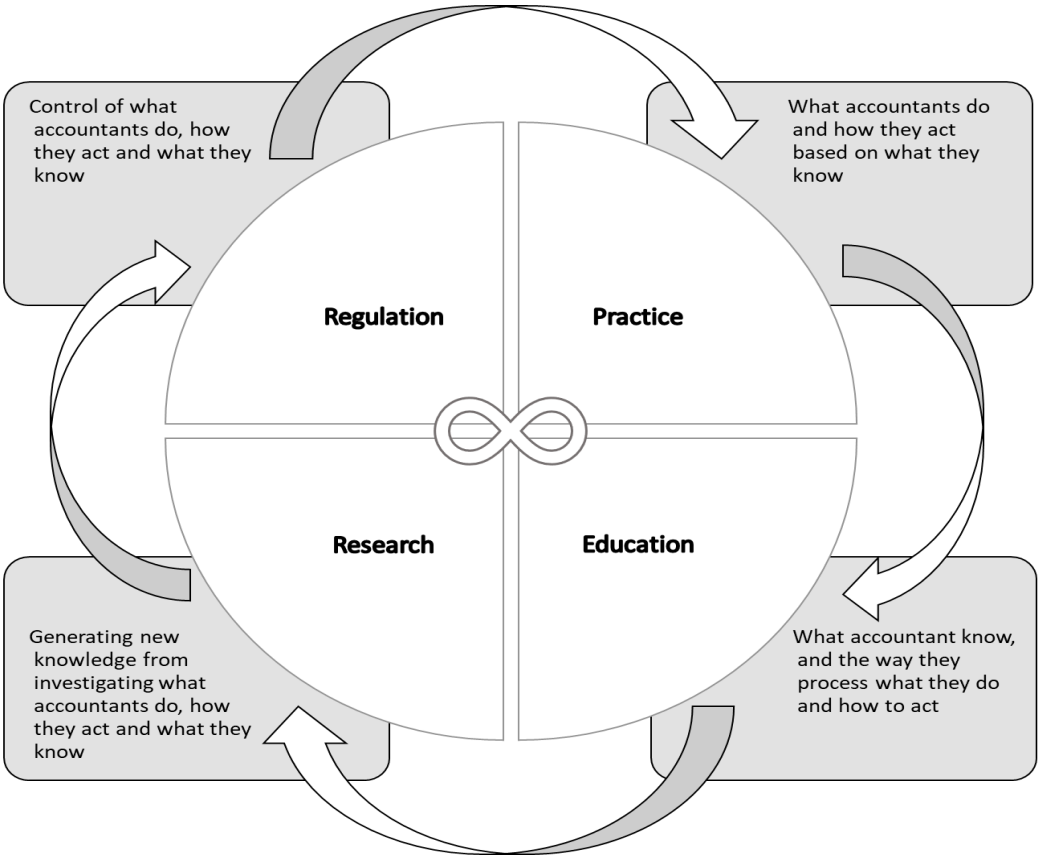
Change in a CAS can also be assessed in cycles between different states: statis (order), chaos (disorder) and the edge of chaos, which precedes system evolution (Chaffee and McNeill, 2007). Chiva-Gómez (2003) and Folke (2019) conceptualise the edge of chaos as an opening for agents to self-organise and adapt their current schema leading to emergence and co-evolution. Thus, change can be found both in the internal feedback dynamics of the CAS and in its response to the environmental triggers and the external condition generated at the edge of chaos or crisis, providing an opportunity for change (Porter and Derry, 2012, Eidelson, 1997). The outcome of changes becomes visible in the system as emergence, non-linearity, and co-evolution. The nature of change in a CAS is not necessarily steady because change may occur rapidly or slowly; it may be constant or have bursts of punctuated equilibrium; it may be resisted or encouraged; it may take little or great resources; it may have a profound or no effect on system outcomes (Dooley, 1997). Folke (2019) suggests that change governance within a CAS must recognise the following: multiple pathways, multiple scales, windows of opportunity, the interplay of fast and slow change, resilience, learning and experimentation, and transformability.

3.1.3 CAS Perspective on PAE

It is important to define the 'system of interest' when applying CAS theory (Boardman and Sauser, 2013) so that external observers can corroborate the composition of the system under consideration (Rammel, Stagl and Wilfing, 2007). The system of interest is defined instinctively by describing the research context and questions (Peltoniemi and Vuori, 2004; Rammel, Stagl and Wilfing, 2007). Given that it is conceptually possible for one CAS to be a sub-system of other larger CASs (Gell-Mann, 1994; Chaffee and McNeill, 2007), PAE is the system of interest

nested in the broader CAS of professional accounting, which includes other subsystems of regulation, practice, and research as shown in Figure 3.5 below.

Figure 3.5: The system of professional accounting and its sub-systems



Source: author's depiction

Lee (1990, p.76) defines accounting as 'a social system with functional sub-systems of practice, research, education, and regulation dynamically interacting over time to produce coherent patterns. Laughlin (2011) draws a similar relationship between accounting regulation and policy, practice, and research whereby each domain maintains autonomy to fulfil its system objectives within the broader system constraints. Accounting has been studied through a systems approach (see Lee, 1990; Robb, 1991; Lawrence *et al*., 2013), but a CAS theorisation aims to propose leverage points where interventions in the system can cause lasting effects (Dooley, 1997; Meadows, 1999; Holland, 2006; Polacek *et al.*, 2012). Dooley (1997) suggests

that the most significant leverage point is achieving consensus about the CAS's mission, strategy, goals, means, measurement, and correction. The core purpose of the accounting profession as a system is generating expertise that serves a wide range of stakeholders and upholding the public interest tagged into its sub-systems (Lee, 1995). The system's goal, be it survival, resilience, differentiation, or evolution, is crucial to understanding system-wide governance that sustains its functions (Meadows, 1999).

System behaviour offers another leverage point through the power of self-organisation and the rules of accounting knowledge. The power of self-organisation is the strongest form of resilience which involves creating new structures, behaviour, and rules at the lower order of the system (Meadows, 1999). The changes in accounting knowledge have been one of the forms of resilience which has been effectual in its practice, research, education, and policy (Lee, 2013). Structure can be a leverage point through the feedback loops that enable information and resource flow from the various accounting sub-systems. The operationalisation of feedback loops in accounting is uneven because of lags and gaps between the functioning of its domain (Lee, 1989; Singleton-Green, 2010; Laughlin, 2011). Lee (1989, 1990) argues that there is a closed loop between practice and education, with research utilised to provide rationales for existing practice rather than being the origin of new practice. Likewise, Laughlin (2011) explains that accounting research, policy and practice operate as worlds apart due to operational constraints and misaligned interests.

Feedback loops in accounting are complex and contentious as there is a disparity between the ideal expectation and the real observation of functions (Lee, 1989). However, Duff, Hancock and Marriott (2020) explain the feedback function in accounting using the process of knowledge construction and reproduction, such that applying knowledge (practice) creates new knowledge (research); communicating knowledge (education) enables innovative understandings

(research), and the practical experience (practice) becomes a form of learning (education). One can add the role of regulation, which is the enforcement and control of accounting knowledge and practices (Laughlin, 2011). Observations of gaps and lags have consequences for the relevance of sustainability in accounting research, practice, and education (Burritt and Tingey-Holyoak, 2011; Magarey, 2011). Further investigations are necessary to study and effectively map the CAS patterns in PAE and to explore the functioning feedback loops so as to understand the pathways of integrating sustainability in PAE at the system level which will be elaborated in later chapters of this thesis.

3.2 Institutional Theory and Field Change

Institutional theory provides a macro-sociological understanding of how organisations operate, are structured, generate meaning, and relate to one another (Suddaby, 2010; Lawrence, Suddaby and Leca, 2011), and has been applied theoretically and empirically to various topics in social sciences and organisational studies (Zietsma *et al.*, 2017). Using this theoretical frame, however, is generates questions about the meaning of institutions and the appropriate level of analysis. The definition of an institution offered in the literature varies in emphasis and scope, with no clear line of demarcation (Suddaby, Cooper and Greenwood, 2007; Hinings, Logue and Zietsma, 2017). For this reason, almost every aspect of the social world can be defined as 'institutional' and suitable of being studied using this perspective (Alvesson and Spicer, 2019).

To address this challenge, Arnold (2009) suggests delineating the appropriate level of analysis between micro, mezzo, and macro levels when defining institutions. While an organisation can possess the characteristics of an institution, fields are specifically suited for mezzo-level analysis constituting institutional arrangements of norms, rules, and structures within a network of organisations (Arnold, 2009). The 'institutional field' represents the central unit of analysis that denotes a collection of interrelated organisations or groups and their shared value systems

(Dacin, Goodstein and Scott, 2002; Lawrence and Suddaby, 2006; Scott, 2008; Suddaby and Viale, 2011; Hinings, Logue and Zietsma, 2017).

Zietsma *et al.* (2017) refine the definition and composition of fields by proposing a streamlined typology divided into exchange and issue fields. They argue that exchange fields have a shared objective to stabilise and coordinate interactions with other institutions, maintain membership through networks, and adhere to compatible practices; whereas issue fields are organised around an emergent central problem with divergent actors pursuing disparate interests (Zietsma *et al.*, 2017). The description of exchange fields by Zietsma *et al.* (2017) aligns with the proposition in DiMaggio and Powell's (1983) seminal work that institutional fields contain a focal population and their interaction with exchange partners such as suppliers, consumers, regulators, and similar (sometimes competing) organisations. On the other hand, Wooten and Hoffman (2008) validate the description of issue fields which are defined by relational spaces that comprise organisations attached to an issue of primary interest while working towards contradicting goals.

Based on the review of previous work about how professional fields produce order, structure, and legitimation, Zietsma *et al.* (2017) categorise professions as a type of exchange field with notable characteristics shown in Table 3.4 below.

Table 3.4: Elements of professional exchange fields

Indicators	**Characteristics Professional exchange fields**
Purpose/Focus	Controlling practices and enforcing boundaries
Boundaries	Boundaries are strong and policed, with legal and educational entry barriers
Constituents	Focal professional population and its interaction partners
Relational structure	Gatekeeper and hierarchical structure usually exist
Logics	Single/few
Identity	Shared - based on education, practices, and values

Implications for Isomorphic Pressures	Isomorphic pressures are intense from professional associations. Innovations are resisted but diffuse when endorsed
Scope of Change	Primarily Convergent
Pace of Change	Slow to change (unless legislated), rapid diffusion
Pathway of change (Linearity)	Nonlinear until the change is accepted, then diffusion is linear (sequential pathway)

Source: adapted from Zietsma *et al*., (2017 pp.89-90)

The purpose of professional exchange fields is to control professional practices and enforce boundaries around their knowledge, expertise, and work (Abbott, 2005; Suddaby and Viale, 2011; Zietsma et al., 2017). Boundaries initially appear in field formation as actors become mutually aware of each other and define the values and symbolic aspects of the field (Suddaby, Cooper and Greenwood, 2007). The focal professional population engages with the State, users of professional services, educators, and other adjoining professions to establish their socio-economic and professional status (Abbott, 1988; Burrage, Jarausch and Siegrist, 1990; Greenwood and Suddaby, 2006; Suddaby and Viale, 2011). Hierarchy is established from the arrangement of homogeneous and heterogeneous actors to produce order in the institutional setting (Zietsma *et al.*, 2017), so the field structure reflects the role and nature of interactions between the different categories of actors.

Institutional logics are also important characteristics of fields with pioneering work being undertaken by Thornton and Ocasio (2008). Logics are the socially constructed normative, structural, symbolic meaning-making systems that govern field actors (Thornton and Ocasio, 2008), represented in fields either through one dominant logic, multiple complementary logics, or multiple logics tagged for different domains (Hinings, Logue and Zietsma, 2017; Zietsma *et al.*, 2017). In professional fields, logics can serve dual purposes of integrating some organisations into a common ideology and interpretative schema while alienating other actors

based on the same ideology (Suddaby, Cooper and Greenwood, 2007). Studies of professions have increasingly shown that they are guided by self-interest, public interest, or iterations of both (Suddaby, Cooper and Greenwood, 2007; Malsch and Gendron, 2013; Muzio, Aulakh and Kirkpatrick, 2019). Operating under common logics means that members of professions display a collective identity reinforced by congruent practices and education mechanisms.

Professional identity refers to the attributes, beliefs, values, motives, and experiences used to define accountant's role in a particular arena (Muzio, Aulakh, and Kirkpatrick, 2019). Professional associations, professional training institutions, and universities have always been essential sites of socialisation into the norms and rules of professional behaviour through education (DiMaggio and Powell, 1983; Leicht and Fennell, 2008). Alongside this, through on-the-job training, employers and accounting firms strongly mediate professional identities (Suddaby, Cooper and Greenwood, 2007; Goretzki, Strauss and Weber, 2013). Studies offer evidence that hybrid identities and even deviation from core identity is possible among professionals (Burns and Baldvinsdottir, 2005; Suddaby, Gendron and Lam, 2009; Goretzki, Strauss and Weber, 2013). Still, homogeneity and convergence are the most desired characteristics in a professional group since a shared identity and purpose substantiate the value of professional expertise.

Contemporary studies on field-level processes are anchored on specialised stems of institutional theory, such as institutional logics (Thornton, Jones and Kury, 2005; Thornton and Ocasio, 2008), institutional entrepreneurship (Greenwood and Suddaby, 2006), and institutional work (Lawrence and Suddaby, 2006; Suddaby and Viale, 2011). Specialised strands of institutional theory were intended to address seemingly overlooked aspects of institutional change. However, researching the change process within a professional field through institutional theory can be daunting because of its fragmentation into strands, new approaches and concepts,

and tautologies that create contradictions in our knowledge of institutional fields (Alvesson and Spicer, 2019; Aksom and Tymchenko, 2020). Regardless, these niche areas of institutional theory are valuable to the discussions in this chapter and help to build an intermediating framework for theorising the dynamics of change. The respective sub-sections incorporate various strands of institutional literature covered under three topics: pressure and change; role of agency, resistance, and power; and patterns of change.

3.2.1 Pressure and Change

The origins of institutional theory focused on isomorphic changes whereby organisations within a field became more similar based on a prescribed ideal (Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Zucker, 1987). Isomorphism was evidence of institutional pressures leading to diffusion, homogenisation, and convergent change outcomes within a field (Scott, 2005). DiMaggio and Powell (1983) elaborate on three mechanisms of institutional pressures that cause isomorphic changes. Coercive pressure from the legitimating powers of political influence and regulatory oversight; mimetic pressures result from organisations modelling the practices of dominant and legitimated organisations in the field; and normative isomorphism often associated with professionalisation such that field institutions define expectations of 'best and customary' conduct (DiMaggio and Powell, 1983; Leicht and Fennell, 2008). These institutional pressures are not treated as distinct because they often intersect within a setting.

Professions are sources of isomorphism but are also subject to coercive and mimetic pressures like any organisation (DiMaggio and Powell, 1983). The two most important sources of isomorphism within professional fields emanate from formal education and legitimation of cognitive base produced by universities and specialist training; and the growth and elaboration of professional networks across organisations from which new models are diffused in the field (DiMaggio and Powell, 1983). Studies by Greenwood and Hinings (1996) and Lawrence (1999)

provide further evidence of the mimetic, normative and coercive pressures at work in the formation and growth of the accounting field and its subsequent expansion into other areas of expertise. The adherence to a common ideology, values and norms intensifies isomorphism directed by professional associations (DiMaggio and Powell, 1983; Zietsma *et al*., 2017). Isomorphic efforts within professions are meant to build, manage, and preserve legitimacy by displaying conformity to expectations (Covaleski, Dirsmith and Rittenberg, 2003).

Isomorphic explanations have been extensively applied to some crucial developments in the accounting field, such as the global adoption of the IFRS (see Koning Mertens, and Roosenboom, 2018; Boolaky, Tawiah, and Soobaroyen, 2020), and the diffusion of sustainability reporting practices (see Higgins and Larrinaga, 2014). Yet, the isomorphic premise emphasising external pressures to conform has been criticised for treating institutional change as externally driven and assuming that change only leads to convergence and stability (Dacin, Goodstein and Scott, 2002; Scott, 2005; 2010). The major weakness in isomorphic theorisations is omitting internal dynamics, power, and radical change processes (Greenwood and Hinings, 1996; Suddaby, Cooper and Greenwood, 2007; Wooten and Hoffman, 2008). These inadequacies generated studies that produced counter-explanations linking field changes to divergence and agency. Updated institutional models did not dismiss isomorphism but affirmed that external drivers coincide with internal mechanisms to produce change (Lawrence, 1999). Such interactive and recursive models were needed to replace deterministic arguments that underplayed agency (Scott, 2005).

Much of the current theorisations of institutional change establish that exogenous and endogenous forces create intricate conditions for field-level changes. Exogenous forces trigger crisis and disturbance, altering the field's stable condition and allowing actors to act towards the field's evolution (Greenwood and Hinings, 1996; Barley and Tolbert, 1997; Wooten and

Hoffman, 2008). Exogenous shocks are also described as 'field-configuring events' (Zietsma *et al.*, 2017), including social, technological, and regulatory changes, political crises, and natural and environmental disasters. In the case of the professions, factors such as market pressures, new locations, innovative technologies, and new clients cause professionals to adapt (Leicht and Fennell, 2008; Scott, 2008). Additionally, Muzio, Aulakh and Kirkpatrick (2019) list multiple factors that have caused disruptions to professional domains, such as loss of confidence, de-legitimising professional expertise, technological revolution rendering professional work obsolete, and a new regulatory bargain reducing the power of self-regulation. Exogenous pressures stem from wider issues in the society and its implications on the perception and expectations on professionals.

Exogenous drivers of institutional change are usually unprecedented, but endogenous factors of change are determined by the strategic intentionality of participants based on field conditions (Campbell, 2009). Actors whose ideas and interests are not adequately served by the existing social arrangements are potential change agents who can mobilise and successfully promote new models of structure and norms (Seo and Creed, 2002; Scott, 2014). Endogenous enablers of institutional change focus on field conditions and the awareness of opportunities by actors with vested interests. Seo and Creed (2002) offer an endogenous change model based on institutional contradictions because of the tensions that are eventually produced from existing institutional arrangements. In this model, the forces of institutional contradictions include inefficiency based on performance gaps, non-adaptability to exogenous triggers, (inter)institutional incompatibilities in values and logics, and divergent interests among members (Seo and Creed, 2002; Greenwood and Suddaby, 2006). Considerable evidence of endogenous triggers in professional fields is the interest fragmentation reflected in the greater division of labour, knowledge stratification, and cognitive complexity (Scott, 2008).

Endogenous explanations sometimes run the risk of treating actors and the field as separate and distinct (Wooten and Hoffman, 2008). To this extent, change cannot merely be perceived as an outcome of institutional pressures but as a process enacted through internal mechanisms allowing for reflexivity of actors within the field. Radcliffe et al.'s (2018) study of tax professionals shows that exogenous field-level shifts created by social pressures and regulative imperative provided an avenue for professional groups to reposition themselves strategically. Explanations of professional field change also highlight the connection between globalisation and the opportunity for accountants to increase the scale and scope of professional service firms and the emergence of supranational professional associations (Suddaby, Cooper and Greenwood, 2007; Faulconbridge and Muzio, 2012).

Isomorphic models are still relevant to understand how norms and practices diffuse across institutional settings (Wooten and Hoffman, 2008), but stability and convergence are a part of the institutional processes as much as change and variability. Field change can be seen as more dynamic while acknowledging that field elements are socially constructed (Lawrence, 1999). Analysing field-level change does not privilege isomorphic pressures but should focus on the diverse institutional pressures by drawing attention to the role of multiple factors and how they are enacted in different contexts.

3.2.2 Agency, Resistance and Power

The interlock of agency and institutional structures, often called the ‘paradox of embedded agency’, was the central dilemma when tackling institutional change that embraces exogenous and endogenous drivers (Battilana and D'Aunno, 2009; Zietsma *et al.*, 2017). One realm of the debate argues for institutional control that restricts how actors respond to situations they encounter in the world (Barley and Tolbert, 1997; Battilana and D'Aunno, 2009). Contemporary neo-institutionalists discarded such deterministic views of institutions in favour of a dynamic,

purposeful, and creative interaction of actors in examining how the field can shift, transcend, or diminish previous models (Wooten and Hoffman, 2008; Micelotta, Lounsbury and Greenwood, 2017). To clarify the paradox of embedded agency, Lawrence, Suddaby and Leca (2011, p.4) elucidate that 'agency is more than the effect of the actors' institutional embeddedness, and neither is it isolated from this embeddedness'.

Agency is a continuous process whereby existing institutions shape actors, with actors reflecting on and strategically operating within their embedded institutional context (Battilana and D'Aunno, 2009; Lawrence, Suddaby and Leca, 2009). Attempts to understand the role of agency in the process of change produced the model of institutional entrepreneurship (DiMaggio, 1988; Lawrence, 1999; Greenwood and Suddaby, 2006). Lawrence (1999) applied institutional entrepreneurship in the Canadian forensic accounting field to reveal that the ability to create change depends on the status (position) and resources controlled by an actor and the extent of their embeddedness in the institutional context. Similarly, Greenwood and Suddaby (2006) emphasise the importance of structural position and power held by elite professional accounting firms who became institutional entrepreneurs or innovators, introducing multidisciplinary practice given their motivation to change, and awareness and openness to alternative models.

The downside of applying institutional entrepreneurship to explain agency is the tendency to focus on central or focal organisations and to see agency as one of the explanatory variables (Suddaby and Viale, 2011). The alternate notion of institutional work relaxes the heroic narrative in most institutional entrepreneurship literature and contributes broadly to how various actors reproduce and change professions (Muzio, Brock and Suddaby, 2013). Institutional work was developed by Lawrence and Suddaby (2006) to define the types of actions that enable actors to create, maintain, and disrupt institutions. Agency through

institutional work involves actors (individuals and organisations) using their autonomy (choice) and actions to modify and even eliminate institutions (Barley and Tolbert, 1997). The interrelations of agency and field structure are captured in a way that does not treat actors as entirely controlled by institutions or as hyperactive institutional entrepreneurs (Canning and O'Dwyer, 2016). As seen in Table 3.5 below, Lawrence and Suddaby's (2006) typology of institutional work includes tracing specific actions and strategies used by various field actors to achieve strategic intents:

Table 3.5: Types of institutional work

Institutional work	**Forms**	**Definition**
Creation	Advocacy	The mobilization of political and regulatory support through direct and deliberate techniques of social suasion
	Defining	The construction of rule systems that confer status identity, define boundaries of membership, or create status hierarchies within a field
	Vesting	The creation of rule structures that confer property rights
	Constructing identities	Defining the relationship between an actor and the field in which the actor operates
	Changing normative associations	Re-making the connections between sets of practices and the moral and cultural foundations for those practices
	Constructing normative networks	Constructing of interorganizational connections through which practices become normatively sanctioned and networks which form the relevant peer group with respect to compliance, monitoring and evaluation
	Mimicry	Associating new practices with existing sets of taken-for-granted practices, technologies and rules in order to ease adoption

	Theorizing	The development and specification of abstract categories and the elaboration of chains of cause and effect
	Educating	The educating of actors in skills and knowledge necessary to support the new institution
Maintenance	Enabling work	The creation of rules that facilitate, supplement and support institutions, such as the creation of authorizing agents or diverting resources
	Policing	Ensuring compliance through enforcement, auditing and monitoring
	Deterring	Establishing coercive barriers to institutional change
	Valourizing and Demonizing	Providing for public consumption positive and negative examples that illustrate the normative foundations of an institution
	Mythologizing	Preserving the normative underpinnings of an institution by creating and sustaining myths regarding its history
	Embedding and Routinizing	Actively infusing the normative foundations of an institution into the participants' day to day routines and organizational practices
Disruptive	Disconnecting Sanctions	Working through state apparatus to disconnect sanctions rewards and sanctions from some set of practices, technologies or rules
	Disassociating moral foundations	Disassociating the practice, rule or technology from moral its moral foundation as appropriate within a specific cultural context
	Undermining assumptions and beliefs	Decreasing the perceived risks of innovation and differentiation by undermining core assumptions and beliefs

Source: adapted from Lawrence and Suddaby, 2006 (pp. 221, 230, 235).

The process of field formation requires actors first to produce institutional elements before their experiences are conditioned by the institutions they create (Battilana and D'Aunno, 2009). Creation work involves establishing rules, defining boundaries, and making meaning

(Lawrence and Suddaby, 2006). Creation work was the orientation in institutional entrepreneurship, which addresses the endogenous conditions and actor capabilities that can produce change (Lawrence, 1999; Dacin, Goodstein and Scott, 2002; Battilana, Leca, and Boxenbaum, 2009). Lawrence and Suddaby (2006) explain that creating institutions involves extensive actions directed at institutional elements. Political tactics of advocacy, defining, and vesting shape coercive elements; normative elements are influenced by reconfiguring identities, normative associations, and normative networks; and mimicry, theorising and educating extend the boundaries and cognitive aspects of the field (Lawrence and Suddaby, 2006).

Studies examining the restructuring of the accounting field recognised similar dynamics of creation work whereby actors within the field make efforts towards defining their boundaries, constructing new identities, introducing new rules and standards, formulating new hierarchies and networks, and theorising innovative ideas (see Greenwood, Suddaby and Hinings, 2002; Covaleski, Dirsmith and Rittenberg, 2003; Suddaby, Cooper and Greenwood, 2007; Suddaby and Viale, 2011; Lawrence, Leca, and Zilber, 2013). In a recent study of the emergence of the carbon accounting profession, Gibassier, El Omari and Naccache (2020) identify knowledge work, identity work, and soft boundary work as forms of action towards institutional creation. The professional group carried out knowledge work by translating the problem and claiming expertise over it, used identity work to define a new identity based on shared competencies and advocacy based on common values, and linked this to the boundary work of achieving closure by controlling membership (Gibassier, El Omari and Naccache, 2020).

Maintaining institutions once created is as important as producing them because the goal is to preserve legitimacy and prevent the demise (deinstitutionalisation) of established structures. Hence, institutional work also includes actions that reproduce and maintain existing institutional structures. Maintenance work consists of actions that support, repair, or reinforce

the current institutional form (Lawrence and Suddaby, 2006). The first three forms of maintenance work (enabling, policing, and deterring) ensure compliance to rule systems, while the others (valorising, mythologising, and routinising) seek to reinforce norms and belief systems (Lawrence and Suddaby, 2006). Studies highlighting maintenance work are less prominent compared to those of institutional creation. However, Trank and Washington (2009) provide insights in their study of business schools, highlighting the role of a field governance association in maintaining the legitimacy of existing institutional arrangements by strengthening the normative and cognitive elements of the field through their influence and social capital.

Usually governance associations such as PABs act as agents of reproduction, given that they ensure conformity and oversee compliance to established rules, norms, and behaviours (Greenwood, Suddaby and Hinings, 2002). While PABs are marked as agents of institutional reproduction and stability, they also curate the discourses around change to prevent the collapse of institutions (Zietsma *et al.*, 2017). Activities of translation and diffusion are critical to institutional maintenance, but taking a partial view that maintenance work is merely about stability can be problematic. In their study of the Italian accounting profession, Micelotta and Washington (2013) theorise maintenance work to be about the resilience of institutions involving the repair of prevalent norms and practices and adaptation to overcome exogenous pressures for change. Their study exemplifies change involving acts of maintenance toward retaining core elements of the institutions. In contrast, Canning and O'Dwyer (2016) found that maintenance work can be adapted for other motives particularly in implementing new regimes signalling the ascendance of rules and systems.

The literature characterises the third type of work involving disrupting institutions as a precursor to deinstitutionalisation. Disruption work is the mechanism that attacks or

undermines the current institutional structure (Lawrence and Suddaby, 2006; Canning and O'Dwyer, 2016). Studies show that dismantling current institutional controls and structures precedes institutional emergence. Lawrence and Suddaby (2006) describe three ways disruption is achieved to minimise controls and justify non-compliance through disconnecting rewards and sanctions, disassociating moral foundations, and undermining assumptions and beliefs. Disruptive tactics are evident in efforts by actors to expand their jurisdiction of work (Covaleski, Dirsmith and Rittenberg, 2003; Farooq and de Villiers, 2018; Taminiau and Heusinkveld, 2020). Farooq and de Villiers (2018), studied the jurisdictional contestations in sustainability assurance between accountants and non-accountants, demonstrating how both parties used disassociating moral foundations to counter each other and promote their interests. Disruptive work explains agency's role in discord because actors who are disinterested in the current regimes facilitate this type of work.

There are few studies explicitly addressing discord, resistance, power, and domination in institutional processes and change (Lawrence, 2008; Malsch and Gendron, 2013). For that reason, Willmott (2015) refutes the capacity of institutional theory to be critical because it underplays such issues. Agency-informed explanations of the institutional change process made efforts to attend to some elements of power and resistance (Wooten and Hoffman, 2008). Resistance can be viewed as a consequence of institutionalisation because of the normative embeddedness of actors (Zucker, 1987; Greenwood and Hinings, 1996). When actors carry out maintenance work, it is to resist external threats and prevent changes (Canning and O'Dwyer, 2016). Thus, resistance can appear in efforts made by actors when facing coercive threats (Micelotta and Washington, 2013) or confronting jurisdictional disputes (Covaleski, Dirsmith and Rittenberg, 2003). Resistance can also make disruptive change possible. As Greenwood and Suddaby (2006) suggest, embeddedness in institutional control can be weakened through

resistance allowing reflection and agency. Actors can resist control through non-compliance, deviance, or resistance to forms of institutional agency leading to change (Lawrence, 2008).

Lawrence (2008) argues that actors react to institutional pressure passively or actively. When industry populations introduced changes, professional associations often resisted, making change take longer and causing disputes (Zietsma *et al.,* 2017). This is also the case when change displaces some functions of PABs, such as the enforcement of a new oversight-supervisory body that superimposes their regulatory operations (Canning and O'Dwyer, 2016). Gibassier, El Omari and Naccache (2020) identify sabotage as purposefully resisting and undermining the birth of a new profession, which can include counter tactics and the absence of work. The absence of work is usually not theorised, but it does not mean an omission, rather it is a passive action aimed at creating a gap or loophole in consolidating the legitimacy of an agenda (Gibassier, El Omari and Naccache, 2020). Thus, the most suitable way of identifying resistance is to understand the embeddedness of actors, their interests, and the power plays.

Actors become more capable of institutional work (including resistance) based on their power, status, or their dis-embeddedness from the institutional governance mechanisms (Lawrence and Suddaby, 2006). Institutional work incorporates the capabilities of actors since their social position, social capital, and power influence actions (Canning and O'Dwyer, 2016). Lawrence (2008, p.174) defines power as the component of a relationship whereby the behaviours and beliefs of an actor are influenced by another actor or system deploying tactics of rational persuasion, exchange, negotiation, moral suasion, and ingratiation. The power of actors in the professional field comes from the ability to set premise/logic, the capacity of critical intervention, and the proximity and extent of exchange with institutional allies (DiMaggio and Powell, 1983).

There are several nexuses of power in the professional field. The profession's alliance with the State grants self-regulatory powers to professional associations (Birkett and Evans, 2005; Suddaby, Cooper and Greenwood, 2007). Clients and employers also utilise 'market power' and 'service logics' to shift professional work and expertise (Faulconbridge and Muzio, 2012; Hinings, Logue and Zietsma, 2017). As accounting firms began adopting the corporate logics and building political power through coalitions, their synergy with big corporations displaced the traditional power dynamics of professional associations (Suddaby, Cooper and Greenwood, 2007). In contrast, Reed (2018) believes that the fusion between the State and capitalist power has encapsulated professional power such that professionals have to adapt to corporate domination and State control to protect their autonomy. The critical professionalisation literature argues that these power relations have always been at the origins of the accounting profession.

Power can be displayed using force to achieve a goal despite the will of the target, whereas influence shapes the will of the target to suit intended outcomes (Lawrence, 2008). Over time, Suddaby et al. (2007) describe a move from 'coercive power' of nation-states and professional associations to 'normative power' used by transnational financial coalitions and multinational professional service firms. Elite accounting firms are increasingly important actors in controlling the production of expertise through their training, socialisation, and transnational operations. The entrance of supra-national professional association shapes global professional projects increasing the scale of power (Scott, 2005; Faulconbridge and Muzio, 2012); so power is constitutive of national and supra-national actors. Some parts of the literature examining the role of agency seeks less emphasis on prominent 'hard' powers but rather on soft power enacted through the resources and social skills of actors (Suddaby, Cooper and Greenwood, 2007; Hinings, Logue and Zietsma, 2017; Radcliffe *et al.*, 2018).

Seo and Creed's (2002) mobilisation of agency propose that change can be initiated by less powerful actors whose interests are not prioritised in current institutional arrangements. They influence the change process by prompting other powerful actors to act (such as the State), forming coalitions or partnerships, seeking endorsement from strong actors in other fields to increase their social capital, and occasionally co-opting elite actors to introduce change (Zietsma *et al.*, 2017). Since each actor regardless of their position in the field can have a role in the change process, it becomes essential that notions of agency explore a wide variety of power bases (Lawrence, 1999).

Consequently, laying out a linear sequence of institutional work required for change outcomes can be difficult because change involves power plays, rounds of experimentation, negotiation, collaboration, and contestation, among actors with diverse interests. Institutional work is fragile and unpredictable, and there is no guarantee that the tactics deployed by actors will result in the intended outcome, as actions can have unintended consequences (Lawrence, Suddaby and Leca, 2009; 2011; Malsch and Gendron, 2013; Canning and O'Dwyer, 2016). Applying institutional work does not need to fit precisely into the originally defined categories in Lawrence and Suddaby's (2006) seminal work; however, the explanatory strength of institutional work is the clear articulation of purposeful and reflexive actions that can be studied alongside transformations of institutions.

3.2.3 Patterns of Change

The interplay of institutional structure and agency is extensively considered in the literature, but temporal and spatial patterns of change, such as pace, sequence, and linearity, are often peripheral to field analysis. Recent studies have become concerned with mapping the patterns of institutional change (Dacin, Goodstein and Scott, 2002; Amis, Slack and Hinings, 2004;

Hinings, Logue and Zietsma, 2017; Micelotta, Lounsbury and Greenwood, 2017; Zietsma *et al.*, 2017); using relevant concepts summarised in Table 3.6 below.

Table 3.6: Mapping institutional patterns of change

Author (Year)	**Concepts in change pathways**
Dacin, Goodstein and Scott (2002)	• Dimension – levels of change from the micro interpersonal and sub-organisational levels to the macro societal and global levels. • Time/duration- relatively brief and concentrated periods or over elongated periods. • Pace - incrementally change less visible to observers and participants or abrupt and dramatic change that discontinues former patterns
Amis, Slack and Hinings (2004)	• Pace - speed of change implementation • Sequence – the order of change in institutional elements • Linearity - direction and consistency of change
Zietsma *et al.* (2017)	• Scope - which specific elements of the field change and to what degree • Pace - the momentum of change slower or rapid • Linearity- how sequential is the change process
Micelotta, Lounsbury and Greenwood (2017)	• Pace _Evolutionary or Revolutionary • Scope _ Developmental or Transformation

The scope or dimension of change seeks to identify which of the field elements are reconfigured in the change process (Hinings, Logue and Zietsma, 2017; Zietsma *et al.*, 2017). Micelotta, Lounsbury and Greenwood (2017) define the scope of change as either transformational or developmental; the former requires overturning or significant alteration to shared understandings and values, while change is developmental when alterations involve elongating rather than discarding field elements. The scope of change can be assessed by the nature of institutional work happening over a period.

Pace is a time factor that addresses whether fields develop incrementally over relatively long periods or in radical ways over short periods and whether certain elements shift faster than others (Micelotta, Lounsbury and Greenwood, 2017; Zietsma *et al.*, 2017). A revolutionary pace occurs when change is accelerated by unexpected external shocks or the intentional actions of change agents, whereas evolutionary change processes are usually slower, triggered by milder environmental forces or by change agents introducing pragmatic modifications (Amis, Slack and Hinings, 2004; Micelotta, Lounsbury and Greenwood, 2017). Campbell (2009) also differentiates between evolutionary change, which involves recombining existing institutional elements termed bricolage, which is usually path-dependent, and revolutionary change which translates and introduces new institutional elements.

Examining field conditions and infrastructure can assist in recognising and explaining the patterns of change. Zietsma et al. (2017) categorise professions as exchange fields and argue that an established (mature) professional field with sustained periods of stability might encounter less radical change leading to realignment and convergent outcomes managed by professional associations. An established field condition is characterised by an extensive infrastructure, governance mechanisms, and coherent ideology that binds institutions (Hinings et al., 2017). Even when a change in professional fields appears radical because several field elements have been reconfigured, such changes take place over long periods before outcomes become discernible, simulating an evolutionary pathway (Hinings, Logue and Zietsma, 2017). Professional fields can become contested when a peripheral actor initiates change, forcing incumbents to defend their positions through resistance or co-optation of the change process (Zietsma et al, 2017). Hinings, Logue and Zietsma (2017) describe contested field conditions as one with conflict and competition for dominance because of low coherence in ideology but

with clear infrastructures. Contested fields can settle abruptly when a new law is introduced to resolve field disputes (Zietsma *et al.*, 2017).

Although change can be perceived and implemented as a linear process in many instances, non-linear patterns are evident under certain conditions (Micelotta, Lounsbury and Greenwood, 2017). Non-linear patterns are observable in a professional field when certain actors engage in power plays, experimentation, negotiation, collaboration, and contestation (Greenwood, Suddaby and Hinings, 2002; Suddaby and Greenwood, 2005; Canning and O'Dwyer, 2016), which precedes endorsement of field transformation by gatekeepers (professional associations or regulators) and subsequent linear diffusion (Zietsma *et al.*, 2017). The scale, pace, and adaptation in a field differentiate revolutionary from evolutionary change outcomes (Greenwood and Hinings, 1996; Amis, Slack and Hinings, 2004; Campbell, 2009). Therefore, the pattern of change in the accounting profession can appear more evolutionary or revolutionary depending on the scale and time frame investigated as well as the conditions of the field.

3.3 Implications of Theoretical Triangulation

Thus far, the theoretical discussion has shown substantial intersections between CAS and institutional theory, but prior studies offer some caveats to their application. Alvesson and Spicer (2019) advise researchers to take extra care in limiting the range of relevant concepts to avoid tautologies and clarify their assumptions to strengthen the explanatory power of institutional theory. Carmichael and Hadžikadić (2019) caution that no CAS theorisation can thoroughly analyse system complexity for every scenario, so the nature of analysis depends on the perspective and degree of interest. Furthermore, social systems are more complex, necessitating reflexive judgements when exploring analogies regarding their CAS characteristics (Chiva-Gomez, 2003). An overview of how both theories describe system or

field constituents, the behaviour of agents/actors, and assumptions about change shown in Table 3.7 below which provides the basis for clarifying and reflecting on their application for this research.

Table 3.7: Applying CAS and Institutional theory to understanding the change process in PAE.

Assumptions	CAS	Institutional Theory (IT)	Implications for the study
Composition	Constituents are *heterogeneous agents* operating a *hierarchy for distributed control* and interacting in an *open form* with its environment. *Boundaries* are *defined* but open.	Constituents are *homogenous* professional population arranged in a *hierarchy* which includes a *gatekeeper (professional association)* and its *heterogenous* interaction partners. *Boundaries* are *guarded* by governance associations.	**Similarities** • Actor/Agents as building blocks of institutions and systems. • Open systems view with emphasis on networks and hierarchies. • Behaviour is based on schema and common purpose. • Agency is based on self-reflection, choices, and adaptive capacity of actors/agents. • Dual view of agency and structures and stability and change. • Endogenous and exogenous factors condition change • Recognise a non-linear change process. • Concerned about mechanisms and pathways of change to both evolutionary and revolutionary outcomes. • Temporal and spatial dimensions of change are relevant • Path dependency is based on experience (or institutionalisation). **Differences** • Boundaries are defined differently because of variation in scale. • CAS focuses on the aggregated processes at macro levels while IT can also enable the exploration of specific. contexts and locations which is useful for micro and mezzo level analysis. • CAS emphasises structural functionality while IT focuses on the social process of legitimation and normativity. • IT captures some aspects of power in agency which is lacking in CAS conceptions.
Behaviour	Behaviour is determined through *interpretative schema* and *feedback loops*. Agents can *self-organise* and form structure and display *adaptability* to system requirements.	Behaviour is driven by the *purpose* of controlling practices and using defined *logics* and *identity*. Actors carry out *actions* to modify, retain or *resist* institutional arrangements enabled through *power* relations.	
Change	Change is created by *external triggers or jolts* to adapt and *internal motives* to achieve fitness. Change produces patterns of *emergence*, *non-linearity*, and *co-evolution*. Change is captured as an *evolutionary* process that occurs over time.	*Exogenous* and *Endogenous* factors drive changes. Change can result from *isomorphic pressures* leading to *convergence* and *diffusion* of practice and norms. Change is produced in a *non-linear* pattern. Change can produce *evolutionary* or *revolutionary* effects.	

Source: author's compilation

Applying CAS and institutional theories follows the same underlying assumption about the mechanisms of change, but both provide a unique learning opportunity from distinctive explanatory toolkits given that they focus on different dimensions of the same phenomenon at distinct scales. Based on the researcher's comprehension of these dual theories, three concepts are espoused for clarifying how they are used to address the research questions which are termed: bridging, elaborative and disparate concepts, respectively. First, bridging concepts is derived from the similarities found in both and can be used to explain the same patterns, whether at the system or field level. For instance, exogenous and endogenous drivers of change (also called external triggers and internal fitness mechanisms in a CAS model) can explain the reasons for integrating sustainability into PAE. An equivalent explanation is found in Abbott's (2005) ecologically informed evaluation of professional systems, which argues that combination of internal and external forces continuously creates paths for expanding or contracting the boundaries of professional work. Furthermore, professionals are especially proactive and reactive at seizing new opportunities to reinforce or discard their earlier jurisdictions (Abbott, 2005).

Secondly, the idea of elaborative concepts refers to shared interpretations in both CAS and institutional theories but is better analysed in one than the other. The function of pace and linearity of change when analysing patterns of evolutionary or revolutionary outcomes is still heavily debated in the institutional theory literature because of practical limitations in defining time and undertaking longitudinal studies of these patterns (Amis, Slack and Hinings, 2004; Micelotta, Lounsbury and Greenwood, 2017). Feedback loops in the professional accounting system based on a CAS insight can be a valuable mechanism for assessing the pace, sequence, and linearity of change. This is in line with the propositions of Micelotta, Lounsbury and Greenwood (2017) who suggest that positive feedback loops are more useful in evolutionary

change, while negative feedback loops are more robust in extreme change cases. By mapping the workings of feedback loops, we can better understand field patterns of change.

Considering institutional change beyond outcomes entails deconstructing structural elements and varied field conditions that enable agency (Battilana and D'Aunno, 2009). Although focal actors in PAE are identifiable in a CAS, their influence does not result in total control of the system. CAS makes propositions about agency through self-organisation and adaptability, which is in congruence with the claims from institutional theory. Likewise, Muzio, Aulakh and Kirkpatrick (2019) argue that professions have resilient and adaptive qualities irrespective of current challenges. Battilana and D'Aunno (2009) conceptualise agency as a partially embedded process of social engagement, informed by the past (habitual aspect- schema and routines) but also oriented toward the future (enabling emergence) and toward the present (adapting for the future and recognising current limitations). Agency expressed through institutional work is relational, multidimensional, and non-linear (Battilana and D'Aunno, 2009). Institutional theory has a robust basis for analysing actors' capabilities, actions, and power relations as they produce changes in their institutional environment or domains.

In addition, because there are apparent differences in time and scales, there are disparate concepts that cannot provide an equivalent explanation or be used to elaborate aspects of a phenomenon. Disparate concepts remain relevant but distinct to each perspective and should not be misinterpreted or used interchangeably. Some instances include system boundaries and field boundaries serving different purposes, or the presence of governing agents such as professional associations in fields but the indifference to authority figures in a CAS. Patterns of change in CAS emphasise aggregate outcomes and behaviours because the whole is greater than the sum of its parts (Holland, 1992; Dooley, 1997). Such aggregate patterns are beneficial for embedding sustainability in transnational education processes. Aggregation has some

relevance to institutional theorists, but context and embeddedness play a greater role in their analysis (Suddaby, Gendron and Lam, 2009; Muzio, Brock and Suddaby, 2013; Reed, 2018). The interpretation of change requires the deconstruction of aggregates which can produce more insights into context-dependent interactions between the actors in an empirical setting. Another significant disparity is that CAS focuses on structural functions, while institutional theory is known for social legitimation and normativity at the field level. For this reason, CAS may be limited for social analysis.

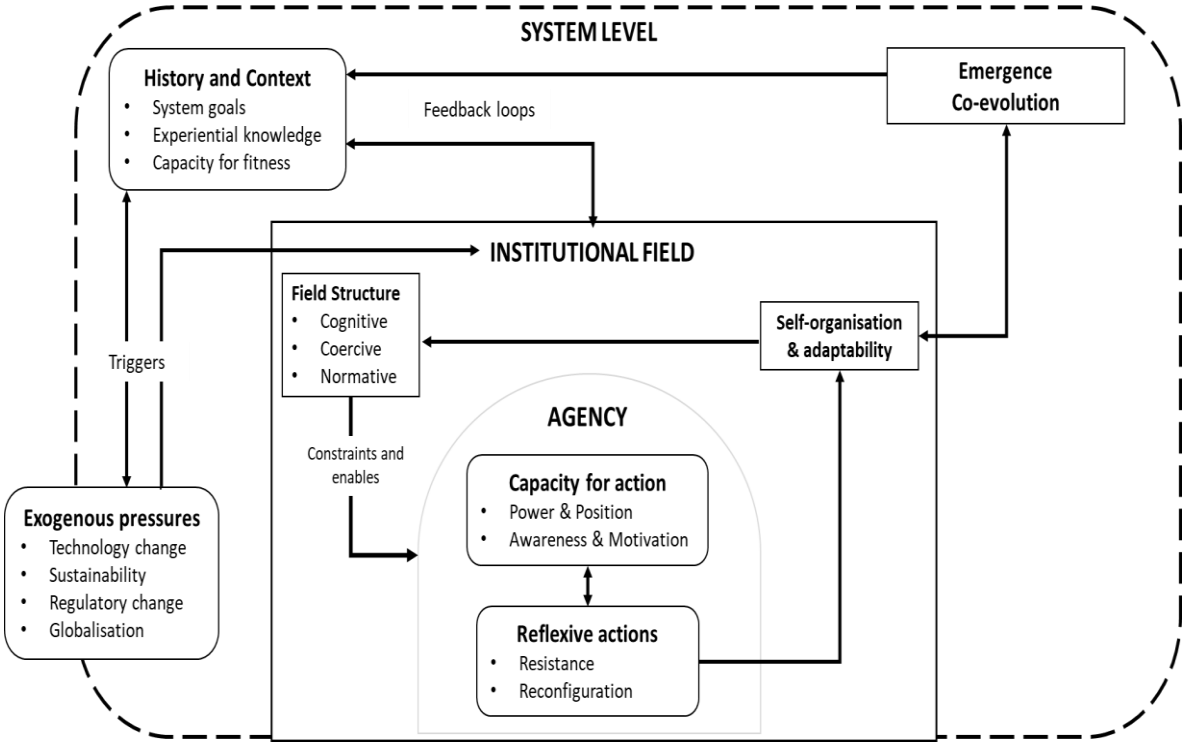
Following this understanding, constructing an intermediating model of institution change draws from varied streams of the work and meticulously navigates between generic and specific concepts to appropriately explain the use of each theory and the contribution to knowledge as detailed in next discussion.

3.3.1 Intermediating Theoretical Framework

The previous sections of this chapter have discussed critical issues about the process and pathways of change at the overarching system level of professional accounting and the contextual factor shaping how actors channel change at the field level. Kim (2005, p.486) argues that 'Institutions are nested in a system structurally linked to other system components such that its persistence and change are closely related to the fate of the system and the environment'. Accordingly, the theoretical framework for this study depicts a multifaceted change process intermediated across nested levels from the environment to the system level, to the field level, and actors exercising agency. A holistic approach founded in systems and institutional perspectives differentiates between system structure (higher order) and institutional structure (lower order) (Kim, 2005). At the system level, the goal is to understand the antecedents, feedback processes (interaction), and patterns of change (Dooley, 1997; Folke, 2019). Whereas the focus at the field level is the influence of institutional structure in enabling

or constraining change (Hinings, Logue and Zietsma, 2017; Zietsma *et al.*, 2017) and the function of agency channelled through capacity and reflexive actions that transform the field and the system (Lawrence and Suddaby, 2006; Lawrence, 2008). Figure 3.6 below illustrates the theoretical framing.

Figure 3.6: Intermediating theoretical framework of institutional field change in a CAS



Source: Author's depiction drawing on Greenwood and Suddaby (2002) and Kim (2005)

The theoretical framework conceives that both exogenous pressures interact with endogenous conditions to trigger change. Exogenous triggers, often called disturbance, crisis, or precipitating jolts, open up the space for change at the system and field levels (Greenwood, Suddaby and Hinings, 2002; Folke, 2019). Path dependency for change is entrenched in the system's history and context as the system seeks to achieve fitness (Holland, 2006; Folke, 2019). The institutional field interacts with its environment under certain constraints structured by a given system; therefore, its maintenance largely depends on how well it fits in the structure

(Kim, 2005). At the field level, exogenous factors disturb consensus in the field structure producing institutional contradictions (Seo and Creed, 2002; Campbell, 2009). Change can be enabled or constrained by the existing institutional structures, such as shared meaning, norms, and practices, often at higher levels of governance (Hinings, Logue and Zietsma, 2017).

Systems and fields are composed of actors (or agents) whose agency creates, maintains, and even disrupts established structures and systems (Lawrence and Suddaby, 2006; Chaffee and McNeill, 2007). Agency is not equally possible for all actors since some have greater capacity to act than others. From previous institutional studies, actors' position and status depicting their power and their distance from institutional control precipitating awareness and motivation for change determines their capacity to contribute to field change (Lawrence, 1999; Dacin, Goodstein and Scott, 2002; Greenwood and Suddaby, 2006). CAS theory also argues that variability in agent attributes affects the capacity for change (Carmichael and Hadžikadić, 2019). Power differences exist between agents, and they are jointly and severely influenced by their characteristics of organisational learning-maximum attention to the environment (awareness), a culture that favours the contribution of discerning ideas (motivation), and openness to and capacity for innovative change (Chiva-Gomez, 2003).

Evaluating agency through intentionality and constraints is more valuable because it is difficult to predict the outcome of actions until it is conveyed and enacted by actors (Lawrence and Suddaby, 2006). The various forms of reflexive action (institutional work) coincide within a field, sometimes with intentions that align (Suddaby and Viale, 2011; Micelotta and Washington, 2013); and other times with conflicting purposes (Canning and O'Dwyer, 2016; Farooq and de Villiers, 2018; Gibassier, El Omari and Naccache, 2020). Gibassier, El Omari and Naccache (2020) offer a pragmatic view of institutional work wherein some actions are

intended to support ongoing institutional processes, and other actions resist or sabotage the process since actors have diverse interests and capacities. This is even more salient if we observe distributed agency within the field (Lawrence, Leca and Zilber, 2013); every actor has a role and expected function in a field (Wooten and Hoffman, 2008). While one actor is interested in expanding the discipline, another might be concerned about preserving the current institutional arrangement (Lawrence, 1999). Even an action such as boundary work can have multiple implications of expanding, guarding, or closing the field.

As agents rethink and reconfigure current practices and perspectives, they create innovative solutions and development pathways that precede field adaptation and systemic transformation (Kim, 2005; Folke, 2019). In a feedback-coupled system, actions translate to effects at the field level through self-organisation and adaptation, while systemic transformation is visible in co-evolution and emergent patterns (Porter and Derry, 2012). Patterns of non-linearity, co-evolution, and emergence can be analysed at the system level through intense rounds of feedback produced through self-organisation, schemas, and adaptability of agents, which happens at micro and mezzo levels (Porter and Derry, 2012, Folke, 2019). Successful, adaptive initiatives become part of the system through the mutual transformation of affected agents, and systemic change is irreversible (Kim, 2005). The change process in the intermediating framework (Figure 3.4) highlights a bottom-up change whereby a new structure emerges from lower-order interactions and a top-down change translated from the higher hierarchy (Kim, 2005).

To conclude, this study recognises time and scale in its theorisation, similar to the approach of Greenwood, Suddaby and Hinings (2002), which focused on the temporal and spatial dimensions to explain institutional change. Although change outcomes are unpredictable,

considering the time it takes for transformation to manifest from one level of system interaction to another aids the analysis of patterns of co-evolution and transformation (Folke, 2019). At the same time, space is the condition for such transformation (Folke, 2019), so the degree to which institutional transformation occurs depends on the institutional contexts, power struggles, and actors' capacities (Campbell, 2009).

3.4 Summary

Theories are not meant to be used solely as predictive instruments but as a way of understanding a social phenomenon in various facets. This chapter has highlighted the significance of CAS and institutional theories in studying how PAE changes to incorporate sustainability in distinct layers and phases. CAS has been adopted as a guide for understanding the interactions between the adjoining systems of professional accounting including education, with the argument that activities in other sub-systems have ripple effects on how accountants are educated and trained because of the feedback loops. Field change is a central issue in institutional theory that has been addressed from varying perspectives. Most studies limit their empirical explanations to certain aspects of the theory, but this study builds an intermediating framework that explains the dynamics of changes created over time through actors' work and strategic intent.

Adopting dual theoretical perspectives is directed by the research questions about how the profession evolves to integrate sustainability, the structural elements and institutional conditions influencing change, and the role of actors in enacting sustainability into the levels of PAE. The challenge with using dual theoretical perspectives is that there is no predetermined framing, so it is important to curate the concepts and explanatory variables for the purpose of this research. Combining multiple theoretical lenses raises concerns about incompatible assumptions often problematic to address in a single study (Hopper and Hoque, 2006). CAS and institutional theories come from related ontological views about reality as a process

constructed by interrelated actions and are well-suited to the research approach (see further discussions in the following methods chapter).

This chapter has shown how each theory contributes to the explanatory potential of the other; therefore, coupling these frameworks is empirically and theoretically significant for studying professional change. Building on this, the next Chapter (4) details the methodological approach for addressing the research questions and outlines the method for collecting and analysing the empirical evidence to generate credible research findings.

CHAPTER 4: METHODOLOGY

4.0 Introduction

Research methodology aims to demonstrate alignment between the research objectives and practice by explaining the way in which the research is conducted (Saunders, Thornhill and Lewis, 2019). The methodological choice involves thoroughly considering multiple factors, such as the researcher's philosophical stance, research objectives, theoretical implications, and the practicality of different research methods. Therefore, this chapter describes the methodological considerations, research procedure, and their implications for investigating the integration of sustainability into PAE.

There are seven sections in this chapter starting with section 4.1 which outlines the philosophical foundations underpinning knowledge production in social science research. The methodological possibilities for answering the research questions become refined from explanations of ontological and epistemological assumptions. Section 4.2 describes the research design and justifies it in line with the researcher's philosophical position. This thesis employs a qualitative case study design, and section 4.2 provides the theoretical and pragmatic rationale for this strategy. The chapter proceeds with detailing the research process and methods, including the data collection in section 4.3, ethical considerations in section 4.4, and methods of data analysis in section 4.5. The remaining section of the chapter highlights the limitations of the research approach in section 4.6, and lastly, section 4.7 summarises the chapter.

4.1 Philosophical Foundations

Clarifying philosophical foundations reveals the researcher's basis for their selection of methods and the coherence of the research endeavour. Disregarding philosophical assumptions can lead to a narrow theoretical focus, laxity in adopting familiar research models, and

unfounded acceptance of dominant ideals within a research community (Lukka, 2010). To this end, Della Porta and Keating (2008) describe philosophical assumptions as the beliefs about the nature of reality and its knowability (ontology), as well as the forms of knowledge production and the relationship between the researcher and the object of study (epistemology). The various philosophical paradigms in social sciences make claims about the ontological and epistemological nature of social reality, leading to various research approaches, designs, analytical techniques, theories, and findings. This section will discuss the philosophical assumptions that underlie the research design and other related decisions made during the research process.

4.1.1 Ontological and Epistemological Assumptions

While the philosophical assumptions may be unconscious, concealed or overlooked, the researcher demonstrates scholarly research practice by making explicit the ontology, epistemology and values underpinning the research (Lukka, 2010). In social science research, the ontological question reveals the reality of a phenomenon based on the objectivism versus subjectivism divide. Objectivism advocates realism from the traditions of natural sciences in asserting that social reality has physical substance in the world and exists independently of our awareness and thoughts (Saunders, Thornhill and Lewis, 2019). Alternatively, subjectivism argues for nominalism in that reality is made of the perceptions and actions of humans, and this reality is further constructed by researchers and social actors (Chua, 1986; Saunders, Thornhill and Lewis, 2019). Subjectivism favours pluralism and prioritises meanings, sensemaking, and the social construction of knowledge (Cunliffe, 2011).

Alongside ontological assumptions, researchers must understand what constitutes knowledge, known as epistemology. It raises the question of how we really know about a phenomenon in the social world and the validity of such knowledge and explanations. Epistemologically,

objectivists study the social world as observable and measurable facts to make generalisations, whereas subjectivists aim to understand the different opinions and narratives of social realities experienced by social actors (Ryan, Scapens and Theobald, 2002; Saunders, Thornhill and Lewis, 2019). Similarly, Della Porta and Keating (2008) describe the objectivist approach as an empiricist epistemology asserting that knowledge is easily captured and the value of knowledge is generating laws about the social world. At the opposite end is the humanist philosophical belief that reality is not knowable and advocates subjective based knowledge (Della Porta and Keating, 2008). These debates on subjectivism and objectivism often seem binary and detached from real-world research practice. The seminal work of Morgan and Smircich (1980) bridges the gap by providing a continuum representing the multiple strands between the extremes of objectivism versus subjectivism alongside their associated epistemological views as shown in Table 4.8 below.

Table 4.8: The philosophical continuum in social science

		Ontology	Epistemology	
OBJECTIVIST	1	Reality as a concrete structure	To construct Empirical knowledge	POSITIVIST
	2	Reality as a concrete process	To study systems, process, change	
	3	Reality as a contextual field of information	To map contexts	
	4	Reality as a symbolic discourse	To understand patterns of symbolic discourse	
	5	Reality as a social construction	To understand how social reality is created	
SUBJECTIVIST	6	Reality as a projection of human imagination	To obtain phenomenological insight and revelation	INTERPRETIVIST

Source: adapted from Morgan and Smircich (1980, p.492)

As illustrated in Table 4.8 above, Morgan and Smircich (1980) define the most objectivist end of the continuum as one where reality is seen as a concrete structure that can be known through

an empirical analysis. This objectivist upper extreme, labelled (1) in Table 4.8, gives rise to the positivist philosophy (Cunliffe, 2011). Nonetheless, objectivist ontologies have been modified to include emergent (process approaches) and contested (critical/discursive) views that admit the existence of concrete reality but with varied characteristics (Morgan and Smircich, 1980; Cunliffe, 2011). These views are sometimes labelled post-positivist philosophies because they reject absolute truths in favour of probabilistic law that evolves with time and place (Della Porta and Keating, 2008).

Morgan and Smircich (1980) characterise the opposing subjectivist view of reality as a projection of human imagination that studies the experiences and embeddedness of social actors within their social reality. Within the subjectivist end, reality is not independent of social actors. As a result, researchers are interpretivist in their philosophical approach as they seek to understand social realities in a particular context and time and how humans shape, maintain and interpret social realities through language, symbols, and texts (Cunliffe, 2011). The subjectivist position also exhibits variations in the degree of subjectivity assumed within ontological and epistemological beliefs which are labelled from 4-6 in Table 4.8 above. The debates above show that many assumptions and perspectives inform different ontologies and epistemologies.

Based on Morgan and Smircich's (1980) framework, the ontological assumption of this research is that social objects are real but constantly evolve as social actors adapt to their environment. Such ontological views resonate with a contemporary realist stance that believes that the social world exists but cannot be fully grasped because it is perceived from partial and positioned perspectives (Cunliffe, 2011). From this perspective, concepts of sustainability, the accounting profession, and education have external substance but are shaped by actors from various social settings, given that the concepts are evolving with time and location. This research also acknowledges subjectivist ideas in that social actors make sense of social realities

as they interact and define meanings and norms within a context (Ryan, Scapens and Theobald, 2002). In this regard, sustainability and education are context dependent and subjective indicating they can be interpreted differently by social actors.

Epistemologically, this research seeks an understanding of PAE as a system in the process of change towards sustainability. It also aims to map out contextual realities that encompasses social structures and agency within the accounting profession. According to Saunders, Thornhill and Lewis (2019) such positions can be described as epistemological relativism, which is a moderately subjective approach to knowledge such that social reality does not exist independently of social actors; rather, it is time and context specific. Then again, Cunliffe's (2011) revision of Morgan and Smircich's (1980) framework highlights the application of moderate degrees of ontological objectivism and post-positivist epistemologies in investigating the process of change, which is also inherent in certain social theories such as institutional theory, systems theory, and actor network theory. Based on such epistemological stance, theories offering a critical understanding of structure and emerging agency while recognising the complex interactions between both would align with the purpose of this research[7].

Consequently, the philosophical foundation of this thesis merges aspects of objectivism and subjectivism without taking a pragmatic philosophical stance that sometimes dismisses the role of ideology and philosophical beliefs. To that extent, there can be no value-free research because value-neutrality is already a value judgement made by the researcher (Chua, 1986). The next sub-section elucidates how these philosophical assumptions fits with research paradigms in accounting and the research approach.

[7] The epistemological position discussed here provide further justification to triangulating CAS theory and institutional field theory in a theoretical framework.

4.1.2 Philosophical Paradigms and Research Approach

Within accounting research, Chua (1986) identifies three main paradigms: positivist, interpretivist, and critical accounting research. Mainstream accounting research is of the positivist paradigm, while interpretive and critical approaches are presented as alternatives to this dominant approach (Ryan, Scapens and Theobald, 2002; Lukka, 2010). Previous discussions in this chapter have already established some of the core elements of positivist and interpretivist positions in social science. In accounting research, Lukka (2010) delineates these philosophical approaches as one based on hypothetico-deductive modelling and empirical analysis (mainstream-positivist), with others seeking social explanations (interpretivist) and critiquing deep-seated structural issues (critical). This research project rejects the mainstream-positivist paradigm because it claims universal truths and is interested in producing deterministic laws and generalisations. Moreso, values, interpretations, and reflexivity are acknowledged as playing a role in this research which are completely neglected and disregarded by positivists (Saunders, Thornhill, and Lewis, 2019).

Parts of this research are relevant to the interpretivist paradigm in that it attends to the social and historical context by which human interactions and meaning making become grounded and reproduced as part of social life (Ryan, Scapens and Theobald, 2002). However, it would not be appropriate to strongly argue that this study fits into the interpretivist paradigm since the philosophical assumptions earlier discussed include moderate versions of realism. Alternatively, the critical accounting research paradigm relaxes the subjective and objective distinction instead focusing on how actors shape, construct and reproduce social structures (Ryan, Scapens and Theobald, 2002). Critical accounting research is committed to uncovering structural patterns and power relations towards radical change and emancipation (Chua, 1986; Lukka, 2010). The research approach adopted in this thesis is intended to produce systemic

changes in PAE as it relates to sustainability, but the emancipatory possibilities may be considered less radical due to its theoretical application as discussed in Chapter 3 of the thesis.

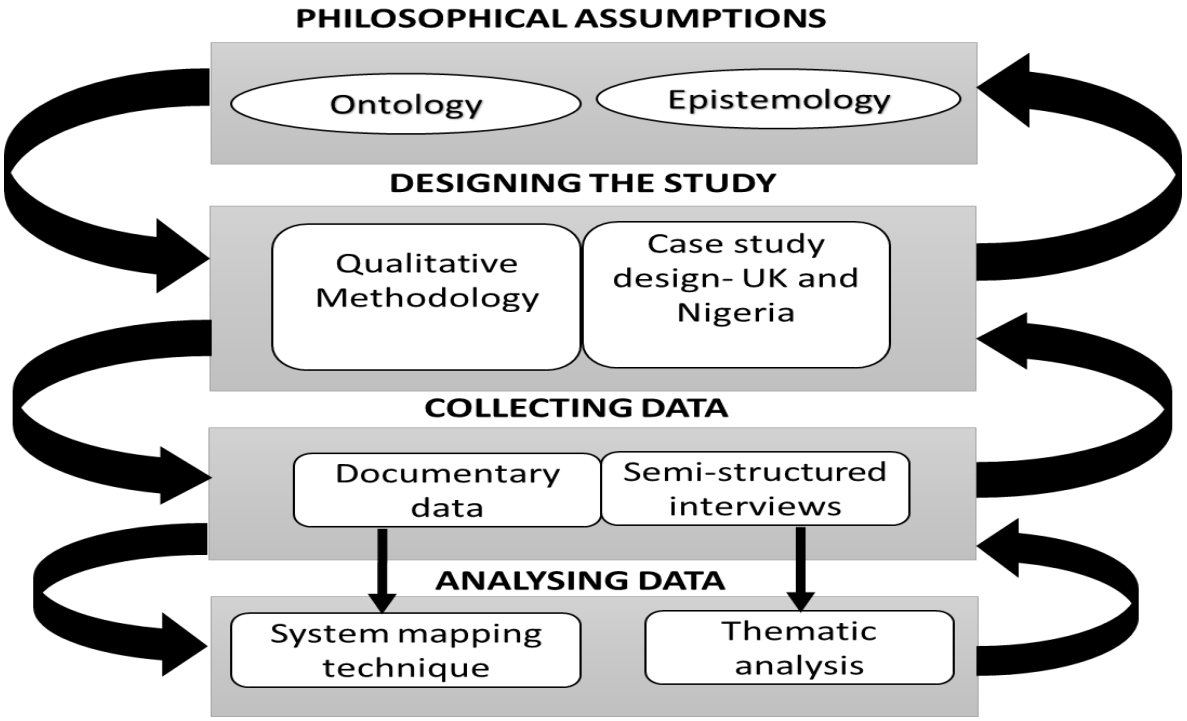
There is no fixed way of judging the best paradigm as each approach will produce varied results even when studying the same phenomenon. As such, this thesis does not seek to resolve paradigmatic conflicts in accounting; instead, it is positioned as part of a critical stance required to uncover underlying mechanisms and complex patterns of changes bearing the idea that change is socially constructed by actors through power and resistance. Studying the social world requires an understanding of the social structures that have given rise to the phenomenon of interest without dismissing the possibilities of change. Therefore, it seeks to discover social mechanisms that apply to specific contexts and offers possibilities for systemic changes in PAE beyond isolated curriculum reforms.

Another pertinent issue to consider alongside the philosophical stance is the approach to theorising knowledge. There are several modes of theorising that are applicable based on philosophical positions. Most positivists follow a deductive reasoning where theories are tested, and the variables have been predetermined; whilst interpretivist research can adopt an inductive logic whereby theories are generated from the data to describe patterns (Cresswell, 2014). A third approach is the abductive reasoning that seeks to uncover a plausible explanation for a phenomenon through an iterative process between the theory and data (Saunders, Thornhill, and Lewis, 2019). This thesis aligns with an abductive mode in that it combines an inductive approach that generates themes from data with a deductive approach where theory is applied to understanding and refining the data through a back-and-forth process (Bell, Bryman and Harley, 2019). The application of the abductive reasoning will be further explained in later sections of this chapter. The chapter proceeds with discussions on the research design.

4.2 Research Design

O'Gorman and MacIntosh (2015) define the research design as a set of interlocking choices made by the researcher to execute the investigation in a way that ensures internal consistency. The research design also involves selecting a strategy of inquiry within three approaches: qualitative, quantitative, and mixed methods (Cresswell, 2014). Therefore, choosing an appropriate research design is of great consequence to the research outcomes and should not be viewed as purely technical as it requires reflexivity on the part of the researcher. To demonstrate cognate reflexivity at each step of the research, Figure 4.7 below shows the research design process from philosophical assumptions to data analysis.

Figure 4.7: The research design process



Previous studies investigating the integration of sustainability into accounting education adopt a variety of designs ranging from action research (Hazelton and Haigh, 2010), case studies (Chulián, 2011; Qian, 2013), survey research (Cho *et al.*, 2020), and mixed methods (Botes, Low and Chapman, 2014). This study adopted a qualitative case study design having considered

the philosophical, theoretical, and practicality of available methods on the research objectives. This section explains the rationale for adopting a case study design and how this informs the rest of the methods applied in this research which may not be possible with other alternative approaches.

4.2.1 Case Study Research Design

Case study research can accommodate a range of philosophical stances, which explains the differences in its application by researchers (Stake, 1995; Berry and Otley, 2004; Lee, Collier and Cullen, 2007; Yin, 2018). The philosophical traditions in accounting apply case studies differently. Based on positivism, a case study is not valuable unless it is linked to hypotheses and follows the well-known hypothetico-deductive model of explanation (Flyvbjerg, 2006). The interpretivist philosophy of case study seeks to understand in depth the case and its related elements (Stake, 1995). Yin (2018) advocates using case studies to address 'how' and 'why' research questions that trace and explain historical or contemporary social phenomena. Based on the philosophical foundation of this thesis, the case study design is suitable for its explanatory ability that captures context and social mechanisms.

According to Yin (2018), case studies can be classified as explanatory, exploratory, or descriptive based on the research purpose. Exploratory case studies are usually conducted to map out research themes before applying other research methods (Lee, Collier and Cullen, 2007; Saunders, Thornhill and Lewis, 2019). Descriptive case studies can be used to expand and describe trends, system practices, and procedures (Scapens, 2004; Lee, Collier and Cullen, 2007), while explanatory case studies can be used in explicating observed causes of an occurrence (Gerring, 2004; Scapens, 2004). In explanatory case studies, the aim is to provide a detailed understanding of a particular phenomenon in the case (Lee, Collier and Cullen, 2007).

These typologies define the application of case study design and the purpose of the cases selected which will determine the direction of theoretical contribution.

One dilemma with the case study design is deciding the number of cases appropriate for the research enquiry. Researchers can choose to focus on a single case or multiple cases for several reasons. Yin (2018) justifies using a single case when the selected case is critical, unusual, revelatory, or longitudinal. Single cases can contribute to theories by expanding constructs and relationships within a distinct setting, providing a unique understanding of such processes in other settings (Berry and Otley, 2004; Ridder, 2017). Alternatively, multiple case studies can be used to develop empirical and theoretical richness for a range of circumstances, either by selecting several similar cases to replicate theoretical explanations or by dissimilar cases to extend the theory (Ryan, Scapens and Theobald, 2002; Ridder, 2017). Baxter and Jack (2008) state that a multiple case study enables the researcher to explore differences within and across settings. Adopting a single or multiple-case approach will be guided by theoretical justification and pragmatic reasoning.

Nonetheless, a case study aims to understand "the case", its functions, and its interaction within the real-world environment (Yin, 2018). As such, accounting research has used case study research in investigating the behavioural aspects of accounting and complex organisational practices in context-dependent scenarios with multiple variables at work (Hagg and Hedlund, 1979; Humphrey and Scapens, 1996; Cooper and Morgan, 2008; Lee and Humphrey, 2017). The qualitative approach is often associated with case studies in accounting research, but its application extends to quantitative and mixed methods strategies. The usage of case studies varies between research ideals and across sub-disciplines such as management accounting, financial management, public sector accounting, and even financial accounting (Lee and Humphrey, 2017). Qualitative case studies usually focus on participants' meanings and

interpretations, and adopt diverse data collection techniques and analytical procedures to generate new knowledge and theoretical contributions (Baxter and Jack, 2008). This method has also been implemented in the sustainability accounting education literature to enable multiple points of analysis and to understand the holistic process of events within the selected case(s) (Qian, 2013; Chulián, 2011; Boulianne and Keddie, 2018; Boulianne, Keddie and Postaire, 2018).

The qualitative case study research design was best suited for investigating the integration of sustainability into PAE because it can address the 'how' and 'why' questions of the research. As detailed in Chapter 1, the research questions were designed to cover descriptive and explanatory elements which are suited to the purpose of case studies. Furthermore, education and sustainability are historical and contemporary phenomena existing within the real-world context. Applying a case study method enables an in-depth examination of the complex system of PAE, institutional elements, and the role of actors within it. The other benefit of this design is facilitating analytical generalisations by producing more profound descriptions from multiple angles (Cooper and Morgan, 2008). As such, this study builds on the argument of Yin (2018) that prioritises holism in defining the case so it cannot be reducible to variables or micro-elements because it is greater than the collection of micro-elements.

4.2.2 Case Selection – UK and Nigeria

The case represents the basic building block of the case study design and depicts a bounded phenomenon existing as a holistic and real-world occurrence and can represent individuals, small groups, organisations, neighbourhoods, revolutions, and Nation-states (Gerring, 2004; Yin, 2018). Stake (1995) emphasises that cases should be selected to maximise the learning opportunity instead of achieving representativeness for generalisation to the population. In comparison, Ridder (2017) describes a theoretical case selection as the use of gaps and holes

sampling focusing on the purpose of the case. Moreso, having fewer cases may be beneficial for conducting a thorough and rigorous investigation of the subject matter which may not be possible with having many (Yin, 2018). Often, the reasons for focusing on one case instead of another can appear ambiguous because the choice may be beyond the researcher's control given other pragmatic considerations (Seawright and Gerring, 2008).

There are trade-offs with using case studies which can affect the research project. Researchers in training are encumbered by the constraints of completing their studies within a specified time (Flyvbjerg, 2006); hence, having just two cases was ideal for balancing the needs of academic contribution to knowledge and expectations of timely completion. Also, the choice of cases was driven by practical limitations of resources such as time, funds, travel requirements, and institutional access needed to successfully conduct the research (Berry and Otley, 2004; Cooper and Morgan, 2008). Prior studies of PAE have used single cases of countries such as Canada and France (Boulianne and Keddie, 2018; Boulianne, Keddie and Postaire, 2018), but this research chose a multiple case of UK and Nigeria to extend the empirical and theoretical contribution to research on sustainability and PAE.

Following Scapens' (2004) approach, each case will be conducted and analysed separately, leading to a comprehensive discussion that connects the case findings for a holistic explanation of the research questions. The UK represents a global ideal being that the professional model for accounting originated there and the professional bodies in the UK have become a globalised enterprise. Accordingly, Berry and Otley (2004) call for research beyond Anglo-Saxon accounting literature to focus on cross-national and cross-cultural case studies given the internationalisation of accounting. Thus, Nigeria was not solely selected for comparative purposes but to enrich the knowledge of sustainability and PAE in underexplored settings and

investigate the usefulness of the theoretical framing under different conditions. Table 4.9 below offers the disparities and commonalities between the UK and Nigeria.

Table 4.9: Characteristics of selected cases- UK and Nigeria

	UK	**Nigeria**
PAE System		
Professional Accounting Bodies (PABs)	Multiple (Five PABs)	Multiple (2 PABs)
Professional education structure	Entry-IPD-CPD	Entry- IPD – CPD
Entry requirement	Several entry routes, an accounting degree is not a critical requirement	Several entry routes, accounting degree not critical requirement
Role of the state	Accounting professional supervised by the Financial Reporting Council (FRC) PABs control the education and admittance of members	Accounting professional supervised by the government agency- financial Reporting Council of Nigeria (FRCN) PABs control the education and admittance of members
Education partners	Accreditations agreements with universities Professional tuition providers	Accreditations agreements with universities Professional tuition providers
International Affiliations	IFAC member	IFAC member
Sustainability		
SDG Prioritisation (Based on most recent Voluntary National Review)	SDG 2- Zero Hunger SDG 6- Clean Water and Sanitation SDG 7- Affordable and Clean Energy SDG 11- Sustainable Cities and Communities SDG 12- Responsible consumption and Production SDG 14- Life Below Water SDG 15- Life on Land	SDG 1- No poverty SDG 3- Good Health and Wellbeing SDG 4- Quality Education SDG 5- Gender Equality SDG 8- Decent work and economic growth SDG 16- Peace Justice and Strong institutions SDG 17- Partnership for the goals
Other Background factors		
Geographical location	Europe (West)	Africa (West)

Economic Development	Developed nation with a GDP of 2.829 trillion USD (2019)	Developing nation with a GDP of 448.1 billion USD (2019)
International political influence	Founding Member of the UN and one of five permanent members of the security council	Member of the UN

Source: author's compilation based on document analysis

The similarities between the UK and Nigeria include professional structure, multiple professional bodies, freedom from State control, entry requirements, and accreditation alliances between the profession and higher education institutions. Nonetheless, there are differences in economic development, national education policy, culture, and geographical region. The contextual similarities and differences between these cases enable an in-depth analysis of institutional elements, agency, and power to offer a nuanced understanding of a complex issue (Cooper and Morgan, 2008). Bennett (2004) commends the case study approach for being able to accommodate a combination of deduction and induction techniques to identify new or omitted variables, make inferences on causal mechanisms, develop historical explanations, and using contingent generalizations to model complex relationships such as path dependency and multiple interactions. In this way, the case study unravels through an abductive reasoning until justifiable research outcomes are reached.

4.3 Research Process and Data Collection

There are essentially three stages in conducting case study research: planning and design stage, data collection stage/fieldwork, and analysis/conclusion. At the data collection stage, multiple sources such as documents, artefacts, archives, interviews, questionnaires, and observations become applicable for analysing the case (Rowley, 2002; Ryan, Scapens and Theobald, 2002; Cooper and Morgan, 2008; Yin, 2018). The practice of collecting several sources of evidence to explain a phenomenon in multiple layers and perspectives is a common characteristic of case study which is known as data triangulation (Ryan, Scapens and Theobald, 2002). In this

research, two sources of data - documents and semi-structured interviews are used to analyse the selected cases. Table 4.10 below clarifies the research procedure showing the links to the research questions, the focus of the investigation, and the phases of data collection.

Table 4.10: Research questions, Investigation, and Data sources

Research Questions	Investigation	Phase one: Documents Analysis	Phase two: semi-structured interviews
RQ1 - How is the accounting profession evolving to integrate sustainability into PAE?	Field-level change		✓
RQ2 - How do structural elements in the accounting profession influence the integration of sustainability into PAE?	Influence of structure	✓	✓
RQ3- How do actors influence the integration of sustainability into PAE?	Role of actors in change	✓	✓
RQ4 - How is sustainability embedded into the components of PAE?	PAE functional change		✓

The two phases of data collection intersect with regards to investigating the research questions. Phase one involved document analysis to understand the elements and structural influence in PAE. Thereafter, the second phase conducted semi-structured interviews with participants belonging to critical stakeholder groups that were identified from the first phase accordingly. The subsequent discussions provide details about the data sources used in this research.

4.3.1 Documentary Data

Phase one of the research collated and analysed documents from secondary sources to map the structure of PAE and to identify actors and their interactions. Documents are especially useful

in process-oriented studies and can offer insights into the background of the case (Bell, Bryman, Harley, 2019). Documents are meant to be used as exploratory and corroborative evidence in case study research (Yin, 2019). The timeline of documents analysed in this research focused on materials produced from 2015 to 2021 because 2015 was the landmark year when sustainability became normalised through the SDGs. The textual documents analysed comprise publicly available materials on the accounting profession and its education structure, and/or sustainability. It includes official reports on the accounting profession from the FRC, annual reports and professional insight publications from PABs, and web pages of organisations such as IFAC to name a few. The full list of document sources is detailed in Appendix 1.

Some issues relating to documentary data include locating it, assessing its usefulness to the research questions, and potential ethical issues (Saunders, Thornhill, and Lewis, 2019). Relevant documents from various organisations were accessed through an online search which was reasonably convenient and involved minimal ethical risks since these documents were used for research purposes only and were appropriately referenced in the thesis. The challenge with sourcing documents online is the substantial number of available materials, which can take an extensive period to sort and review (Yin, 2018). Thus, the researcher spent considerable time reviewing these documents to ascertain those central to the research aim and ensuring their authenticity and credibility.

Following the data collation, the next step was describing each organisation, their functions, and interconnections. Undertaking this descriptive process aided the recognition of key organisations and identification of potential interviewees. Documents were collated for the two cases, but the UK documentary data was more extensive over the period and offered richer descriptions of the area of study. Hence, it was possible to carry out further analysis of the UK documentary data to create a PAE system map as detailed in section 4.5.1 of this chapter. The

document analysis facilitated a macro view of PAE and generated preliminary findings as presented in Chapter 5; and subsequently used to prepare the interview guide used in the semi-structured interviews which will be discussed next.

4.3.2 Semi-structured Interviews

Interviews are a commonly used data collection method, either in the form of a structured interview with standardised questions, semi-structured following a pre-determined but unrestrictive guide, or unstructured involving open-ended questioning (Saunders, Thornhill, and Lewis, 2019). Of these three, semi-structured and unstructured interviews are appropriate for the qualitative case study design (Yin, 2018). Bryman (2016) further distinguishes the semi-structured interview as being suitable when the research focus is clear and especially in multiple-case studies where a cross-case analysis is crucial. By these reasons, the semi-structured interview method was employed because it allowed a flexible and open-ended questioning that recognises participants' backgrounds and expertise while covering specific areas of interest. Additionally, this method fosters a degree of coherence between the selected cases supporting the analysis and consolidated discussion of findings.

Initial interviewees were purposefully selected based on experience and expertise on the research subject. After contacting a few potential participants, a snowballing approach helped to recruit more participants to expand the data set and ensure representativeness from relevant actor clusters within PAE. Snowballing is a sampling technique whereby initial interviewees identify or suggest other potential research participants (Saunders, Thornhill, and Lewis, 2019). Participants have an extensive role in case study research because they are not only asked to give insights about the topic but often suggest other participants or other relevant information based on their widespread expertise (Yin, 2018). Overall, thirty (30) interviews were conducted with thirty-two (32) participants across the two cases representing several actor clusters in PAE

including accounting academia, PABs, professional tuition providers, regulators, accounting practitioners, and professional interest institutions, with some being hybrids as they are multi-embedded in more than one group. Table 4.11 below shows the complete list of interviewees and details of interviews undertaken in the UK and Nigeria.

Table 4.11: Details of interviews in the UK and Nigeria

Interview number	Code name	Actor cluster	Date of interview	Venue of interview	Duration (Minutes)
1	P01	HYB (PAB & ACD)	18.02.2021	virtual- zoom	119
2	P02	HYB (PAB & ACD)	20.02.2021	virtual- zoom	75
3	P03	PAB	26.02.2021	virtual- zoom	40
4	P04	ACD	04.03.2021	virtual- zoom	26
5	P05	PAB	17.03.2021	virtual- zoom	50
6	P06	ACD	18.03.2021	virtual- zoom	54
7	P07	ACD	22.03.2021	virtual- zoom	53
8	P08	PAB	24.03.2021	virtual- zoom	58
9	P09	HYB (ACD & PAB)	26.03.2021	virtual- zoom	62
10	P10	PAB	26.03.2021	virtual- zoom	58
11	P11	PTP	01.04.2021	virtual- zoom	56
12	P12	HYB (PII, ACD & ACP)	06.04.2021	virtual- zoom	38
13	P13	ACD	09.04.2021	virtual- zoom	22
14 **	P14 P15	PAB PAB	19.04.2021	virtual- zoom	59
15	P16	PII	23.04.2021	virtual- zoom	64
16	P17	PAB	11.05.2021	virtual- zoom	39
17	P18	HYB (ACD, PAB & PII)	13.05.2021	virtual- zoom	45
18	P19	HYB (PAB & ACD)	27.05.2021	virtual- zoom	52
19**	P20 P21	REG REG	25.06.2021	virtual- zoom	54
20	P22	ACD	18.08.2021	in-person	39
21	P23	PAB	25.08.2021	in-person	24
22	P24	ACD	30.08.2021	in-person	61
23	P25	HYB (ACD & PAB)	01.09.2021	Virtual	31

24	P26	PTP	04.09.2021	in-person	51
25	P27	HYB (ACD & PAB)	20.09.2021	virtual- zoom	56
26	P28	PAB	23.09.2021	virtual- zoom	57
27	P29	ACD	23.09.2021	virtual- zoom	24
28	P30	ACP	29.09.2021	virtual- zoom	30
29	P31	PAB	07.10.2021	virtual- zoom	27
30	P32	REG	25.10.2021	virtual- zoom	27

Code: UK Nigeria **** Joint Interviews**

Actor group: Professional Accounting Body (PAB), Professional Interest Institutions (PAB), Accounting Academia (ACD), Professional Tuition Providers (PTP), Regulatory organisations (REG), Hybrid - a participant representing more than one actor group (HYB)

For the analysis - interview quotes are identified by code name and actor cluster

For the UK case, thirty-five individuals were contacted, with twenty agreeing to be interviewed. All interviews were conducted online from February to June 2021 due to Covid-19 restrictions. The plan was to use one-to-one interviews; however, some participants from the same institution requested joint interviews. Joint interviews meant that two people are interviewed simultaneously on similar questions so that they can actively interact during the interview, which exposes issues of convergence and divergence on the research topic (Wilson, Onwuegbuzie and Manning, 2016). Only two interviews were joint interviews, and the researcher ensured that each person responded to questions covering the same topics with additional questions posed to individuals based on their specific background, experience, and prior responses.

Following the UK interviews, fieldwork was conducted in Nigeria from July 2021 to October 2021; of the eighteen individuals contacted, twelve were interviewed. Since the Covid-19 rules in Nigeria were still in place, four interviews were conducted face-to-face in various locations in South-West Nigeria (see table 4.11). The remaining eight interviews were online as most

interviewees were accustomed to using online tools for work and meetings due to the pandemic. Online interviews are beneficial because of convenience and saving travel time between locations (Saunders, Thornhill, and Lewis, 2019). Still, there are some disadvantages to using internet-mediated tools for interviewing. An unstable internet connection can disrupt ongoing conversations, and in two instances, the interview had to be restarted because of poor internet connection. All interviews were audio-recorded, and the researcher made notes during and after the interviews to mitigate these circumstances.

Using semi-structured interviews in the second research phase facilitated exploration of developing themes from the document analysis and investigated other questions that could not be discovered from documents. This interviewing method emphasises interviewees' understanding and framing of issues and events even though the topics to be covered are pre-arranged in the interview guide (Bryman, 2016). The interview guide was prepared to address four broad categories: the structure and changes in PAE, influences in PAE including actors and relevant domains, sustainability integration in the levels of PAE, and issues in integrating sustainability into PAE (see full details in Appendix 4). The interview questions were informed by the research objectives and preliminary themes from the document analysis. After the first few interviews, the interview guide was further polished as the researcher gained exposure to the perceptions of participants. During the interviews, questions were slightly modified to suit each actor cluster and were not asked in a fixed sequence; probing questions were also used to obtain additional information. Interviewees were always encouraged to speak openly and freely share their views, but the researcher had to be intentional about establishing trust and being attentive to non-verbal cues during the interview, but this was challenging to do with online interviews.

Another issue with interviews is judging the ideal number that is sufficient for the research (Bell, Bryman, and Harley, 2019). Saunders, Thornhill and Lewis (2019) recommend between 5 – 25 as a suitable range for semi-structured interviews; however, this suggested range is still affected by many other factors such as research purpose, access, time, and cost. Typically, qualitative researchers consider stopping interviews when they have reached a point of data saturation (Cresswell, 2014). Data saturation is realised through good data handling as the researcher scopes the data to ascertain that no new insights or themes are emerging (Richards, 2015). Some caution with using data saturation is that it is often difficult to explain or justify without bias. Patton (2015) suggests incorporating variety as another criterion for determining the sufficiency of interviews because a homogenous sample may result in reaching data saturation at an earlier stage compared to a more diverse sample. Therefore, this research applied saturation and variety to determine when to stop the interviews ensuring the data can support meaningful case analysis and credible conclusions.

4.4 Ethical Considerations

Ethical issues are implicit at all stages of the research, particularly when collecting data from human participants. Hence, this research project underwent and obtained ethical approval from the University of Birmingham Ethical Review Committee to ensure compliance with all ethical guidelines in interacting with research participants and managing research data responsibly (See Appendix 3). Although the research topic may not be critically sensitive or personal to participants, researchers must ensure they obtain informed consent, safeguard privacy and confidentiality, protect participants from harm, and respect participants' right to withdraw (Yin, 2018; Saunders, Thornhill and Lewis, 2019).

The researcher negotiated access in both cases by liaising with project supervisors, reaching professional contacts within the UK and Nigeria, and subsequent referrals from early

interviewees. Negotiating access can be challenging in Nigeria, but the researcher's background as an academic and professional accountant provided a link to the gatekeepers in Nigerian PAE. Each participant was first contacted by email or phone, introducing the researcher, the purpose and nature of the research project, and soliciting their participation in the study. After indicating their interest, they were sent the participant information sheet containing all necessary information about the study, the benefits and risks of participation, and the rights and responsibilities of participating. Not all participants contacted decided to join the research as they were aware of the voluntary nature of participation as mentioned in the prior section. Interested participants authenticated their participation through signed consent forms and were advised that they could withdraw their involvement up to three weeks after the interviews were conducted. There were no instances where consent was withdrawn.

Some ethical risks manifest during data collation and analysis requiring sufficient care in data handling. Assigning pseudonyms, removing personal data references, concealing institutional affiliations, and redacting specific details as requested by some participants guaranteed anonymity and confidentiality during transcription. Transcription for the UK case was carried out by a trusted UK transcription service provider that complies with the UK General Data Protection Regulation (GDPR) and offers up-to-date data encryption protocols in compliance with the University of Birmingham regulations. The researcher took responsibility for transcribing the Nigerian interviews adhering to all ethical guidelines. Data storage and archiving followed the University of Birmingham data management protocols to ensure responsible handling of all research data.

4.5 Data Analysis

Granted that this research collects data from two sources, the data collected was analysed using different techniques. Nonetheless, these techniques are interrelated as they contribute to

understanding the cases holistically. Document analysis from the UK case was used to create a system map based on the mapping technique of Boardman and Sauser (2013); whereas, the interviews were analysed using Braun and Clarke's (2006) thematic analysis. This section offers more details on the analysis of the data generated from the research.

4.5.1 System Mapping Technique

Based on the documentary data from the UK case, a system map was constructed to illustrate the PAE structure, including the actors, processes, and interactions (see appendix 2 for system mapping index). The mapping technique used in this study is founded on system thinking methods that resonates with a CAS theorisation of interconnectivity between parts and whole. Boardman and Sauser (2008, 2013) offer a guide to using systems thinking to create system maps, also known as "systemigrams", which are as follows:

1. Identify the system of interest.
2. Define the system boundary (including exterior and interior).
3. Determine the parts, relationships, and wholes.
4. Identify functions and processes (inputs and outputs).
5. Identify emergence and transformations.
6. Produce a system description based on (1-5).
7. Create a systemigram or system map from the system description.

As mentioned in the theoretical framework chapter, the system of interest is PAE, but defining and distinguishing its boundaries can be challenging. Separating the system boundaries relies on the researcher's interest and scope of investigation, but oftentimes it is instinctively defined through the research process (Phillips and Ritala, 2019). For the sake of this research, the boundaries of PAE have been defined with reference to the UK context, placing PABs at the

centre of PAE provision and portraying the role of key organisations supporting the process at various stages.

The limit to using system mapping is that not all perspectives are contained or adequately represented; it shows a snapshot of the time and context of a subject matter and cannot achieve a universalised view of processes and transformations. Researchers must balance variety to show as many angles of the system as possible, parsimony to keep a realistic focus, and harmony to ensure that the map is meaningful to the audience (Boardman and Sauser, 2013). The system map is represented through colour-coded nodes, boxes, and arrows; the nodes and boxes represent material and non-material elements while the arrows show relationships. The PAE system map with accompanying system descriptions are contained in Chapter 5 of this thesis.

4.5.2 Thematic Analysis

The thematic analysis approach of Braun and Clarke (2006) was used to analyse the interviews as it provides an open and flexible method for identifying themes and patterns in the data set. Several important decisions characterise its application such as building from the data (inductive) or by reference to predetermined theory (deductive), as well as using the explicit expression of the interviewees (semantics) or the interpretations of what interviewees said (latency) (Braun and Clark, 2006). In reality, the analysis process may not rely purely on a single approach but can involve a combination of approaches as demanded by the nature of investigation (Byrne, 2022). An abductive reasoning combining both inductive and deductive modes is consistent with the analytical strategy advocated in this thesis. The identification of themes and patterns began through an inductive logic focusing on what interviewees said, but these patterns were deliberated and refined with reference to the research questions and

theoretical framework to produce relevant findings. Further explanations of how the abductive analytical process unfolds will be provided in the next paragraphs.

The interview analysis was ordered through five phases as defined by Braun and Clarke (2006, 2012) which include familiarisation with the data, coding the data, searching for themes, reviewing and refining themes, and producing the final report of findings. The first step of becoming familiarised with the data began during the transcription stage and through further repeated reading of the transcripts to carefully understand the scope of the data. The UK interviews were transcribed by an external organisation, but the interview recordings were replayed several times in the process of ensuring the consistency and accuracy of the transcripts. Meanwhile, the Nigerian interviews were transcribed by the researcher allowing thorough familiarisation with the transcripts. During this process of familiarisation, preliminary codes were identified through notetaking to indicate repeated points emerging from the data.

Codes are the basic labels to sort, define, and summarise segments of the transcripts that are useful to the research enquiry (Given, 2008). The researcher employed the NVivo software to openly code the data covering the entire interview set for each case. The coding process prioritised the views of the interviewees, but in other instances, the researchers sought the latent meaning communicated by the participants. According to Richard (2015) the process of coding goes beyond description or assigning topics to segments of the transcripts but requires interpreting and reflecting on meanings expressed by interviewees. After this step, the researcher reviewed the codes being attentive to the excepts from the entire data set in search of themes. Searching for themes requires understanding the links and continuities within the array of codes (Bryman, 2016). Refining and naming the themes helped to generate coherence in the analytical process especially since these themes were examined in relation to the research questions.

As shown in Table 4.12 below, all initial themes were redefined and renamed, some initial themes were split into new thematic categories, others were excluded because they did not have significant bearing to the analytical interests of the case. As Cresswell (2014) suggests, the generated themes are used as headings for presenting the findings in Chapter 6 for UK and Chapter 7 for Nigeria. Each of these chapters also contains diagrams summarising and depicting the connections between the emerging themes. Likewise, relevant interview quotations were chosen to represent the generated themes and evidence the interpretations of the case findings but were edited in minor places for readability and clarity. The steps in thematic analysis should not be assumed as linear, but the researcher moves back and forth between the phases to ensure analytical rigour and relevance (Saunders, Thornhill, and Lewis; 2019).

Table 4.12: The process of refining and naming themes illustrated using the UK interview analysis.

INITIAL THEMES FROM CODING					
Theme 1: PAE environment	**Theme 2: Sustainability Transition**	**Theme 3: Pathways of Change**	**Theme 4: Actors and Influence**	**Theme 5: Elements of the Accounting Profession**	**Theme 6: Issues in PAE**
External drivers of change Marketplace for accountants Adaptation to Technology Pressure on the profession Internal motives for change Motives of the profession Relevance Internationalisation	Motivations for including sustainability. Resistance from the profession Sustainability views and definition -Risk and uncertainty -Balanced- win and win -Value creation -Time and space -The Planet Challenge with understanding sustainability Scope of change in sustainability Climate as a critical issue	Regulation as a driver for sustainability Pace of change Multiple channels of change Resistance to change Mindset of sustainability Sustainability Skillsets Approach to sustainability in PAE	Role of PABs Role of Big4 and ACPE Role of accounting academia Role of Employers Role of Accounting students Role of Universities Role of PTPs Role of the State Role of IFAC Interactions between actors Power and influence Acting for sustainability	Purpose of Accounting Identity and Role of Accountants Role differentiation of Accountants Mindset of Accountants Public interest obligation	Levels of PAE Apprenticeship model Qualification process Teaching and Learning delivery Case study innovation CPD Skills versus Knowledge Overcrowded syllabus Technology in assessments
Theme 1: Drivers of Change in PAE	**Theme 2: Views and Interpretations of Sustainability**	**Theme 3: Structural issues in PAE**	**Theme 4: Relational Issues in PAE**	**Theme 5: Conditions for integration**	**Theme 6: Approach to Integration**
Reasons for Changes in PAE -Pressure for relevance -Internationalisation **Rationale for sustainability in PAE** -Mainstreaming -The Business Case -The public interest	**Expansive view** -The Planet -Time and Space **Applied view** -Balancing/Win-win -Opportunity/Value creations -Risk and uncertainty	**Influence of Domains** -Regulation -Practice -Research -Education **Pace and direction of change**	**Role and interests of Actors** -PABs -Accounting firms and practitioners -Employers -Accounting Students -Accounting Academia -Universities -Professional Tuition Providers -The State -Professional Interest Institutions **Interactions through power and influence** -Actors with power and influence -Devices of power and influence	**Barriers to Integration** -Relevance of sustainability to accounting -The perceived complexity of sustainability -Conflict in professional identity and role -Low prioritisation of Sustainability **Strategies for integration** -Capitalising on the public interest -Reorienting mindsets and values -Role and identity differentiation -Expanding to new Frontiers-Nature and Society -Affirming emergent sustainability concepts	**Knowledge areas** -A separate core subject. -few existing subjects -All subjects **Ethics and Moral Philosophy** **Skillsets and Competencies** -Interdisciplinarity and collaboration -Holistic and integrated thinking -Problem-solving and critical thinking
REFINED AND RENAMED THEMES					

4.6 Limitations of Research Methods

The qualitative case study design is often criticised for being weak in producing generalisable findings. Generalisability is often connected to other factors such as bias, subjectivity, reliability, and validity in qualitative studies (Scapens, 2004; Cresswell, 2014). However, such arguments have been developed from positivist foundations with a deductive reasoning. The case study design is useful for theoretical explanations which are not quantifiable or reduceable to deductive ways of knowing. Furthermore, selecting multiple cases of Nigeria and UK allay such criticisms since multiple cases have a stronger basis for theoretical analysis and propositions (Ryan, Scapens and Theobald, 2002; Ridder, 2017). Though Nigeria and UK appear as comparative cases, they also share considerable commonalities enabling an in-depth analysis of structure, agency, and change under different conditions to generate empirical novelties and theoretical generalisations (Ryan, Scapens and Theobald, 2002; Cooper and Morgan, 2008).

Another arguable limitation arising from the data collection process is participation bias in the selection of participants, and differences in cultural orientations that can affect the validity and reliability of the research outcomes. Participation bias may arise from the background of individuals who agree to be interviewed and the information they choose to share with the researcher (Saunders, Thornhill, and Lewis; 2019). Even though the selection arrangement of using purposive and snowballing technique benefited the research project, such an approach may lead to selection bias. For instance, interviewees' definition of sustainability will reflect their expertise on the subject matter which may not represent the views of many others in the accounting profession. Also, accounting academics with sustainability as a research interest are likely to hold stronger views about sustainability integration in PAE than those in different research areas or educators who are non-academics.

To address this limitation, the researcher ensured that the interviews covered a range of heterogeneous actors from various parts of the PAE system. Interviewees included those directly or indirectly connected to PAE provision with varying sustainability knowledge and expertise; and several of them were 'hybrids' who could share insights from multiple domains of experience and expertise. Getting interviews with accounting practitioners was difficult, as several attempts to make contact were unsuccessful. Although not all actor groups are represented equally for each case, the depth of the interviews will sufficiently elaborate the key research questions and reveal variations within and across actor groups.

Equally, the research findings depend on the information provided by research participants. Conducting multiple case studies revealed differences in cultural orientations regarding expressions and the use of words. Misinterpretation of questions based on personal views was a challenge in this study. For instance, asking some participants about their understanding of sustainability resulted in responses founded in synonyms of sustainability, such as longevity or continuity. To address this, the researcher adapted the interview guide to the context and rephrased questions where necessary. Using follow-up questions also helped participants confirm, re-evaluate, and clarify their responses which ensured the credibility of the information they provide.

The methodology of qualitative studies does not claim to provide the precise answers or laws but it focuses on explaining the rigour of the research process to sufficiently persuade the reader of the reliability of findings (Richards, 2015). As such, this chapter has attended to explaining the research process and ensure that readers have sufficient information to judge the rigour of each case and the credibility of the research findings.

4.7 Summary

The methodology chapter bridges the gap between the research objectives specified at the start of the thesis, the procedure of addressing these objectives, and the accompanying findings. The philosophical foundation of this research has moderate elements of realist and social constructivist philosophies and is positioned to produce critical transformations in PAE by investigating underlying structural issues. Following closely to the underpinning philosophy is the adoption of a qualitative case study design with the UK and Nigeria selected as cases. The lack of formal criteria for case selection meant that theoretical value and pragmatic considerations were applied to selecting these cases. These cases are instrumental in analysing the similarities and critical differences between contextual settings in terms of sustainability, the accounting profession, and education to produce analytical generalisations.

There were two phases to the research process. First, document analysis was used to understand the setting of each case and to build a system map of UK PAE. Second, semi-structured interviews with relevant actor clusters in PAE produced additional data that was analysed using thematic analysis to produce case findings. Ethical considerations were at the core of each phase and the researcher followed all necessary guidelines to ensure compliance with the University's ethical code and participants' rights. The chapter also discussed some limitations of the research design and methods which can affect the credibility of the findings and how they were addressed. The next chapter presents findings on the document analysis and seeks to map the context of PAE and Sustainability in the UK and Nigeria.

CHAPTER 5: MAPPING THE CONTEXT OF PAE AND SUSTAINABILITY

5.0 Introduction

This chapter examines the context in which sustainability integration materialises in PAE in the UK and Nigeria. It follows the prior methods chapter to further explain the contextual similarities and differences between the selected cases and describes the outcome of the documentary analysis for the UK case. The system map of UK PAE discussed in this chapter facilitates understanding how and where elements of PAE would encompass sustainability concerns as well as the broader implications for the accounting profession in addressing sustainability matters through PAE changes. As such, this chapter is relevant to two of the research questions: RQ2- *how structural aspects influence the integration of sustainability into PAE?* and RQ3- *how actors influence the integration of sustainability into PAE?*

This chapter is organised into four parts. First, section 5.1 discusses the UK accounting profession, including the PAE system and the influence of the sustainability agenda. Next, section 5.2 provides a brief history of the Nigerian accounting profession, the PAE framework, and the emergence of sustainability within this context. Section 5.3 examines the implication of context on studying the integration of sustainability into PAE, and finally, the chapter is summarised in section 5.4.

5.1 The UK Accounting Profession

Historical accounts show that accounting professionalisation began in the UK and spread across the globe since then (Parker, 2005; Richardson, 2017; Yapa, 2021). At the outset, various professional groups in the UK sought to differentiate their status and role leading to proliferation of institutions (Walker, 2022), but over time, these PABs have become

more similar as they conform to comparable standards, are regulated under unified regimes, and adapt to changing technology and societal expectations. The UK currently has six main PABs instituted by a Royal Charter (see Table 5.13 below).

Table 5.13: List of Professional Accounting Bodies in the UK

S/N	Professional Accounting Bodies	Year founded	Granted Royal charter	Total global members and students (2021) **
1.	Institute of Chartered Accountants of Scotland (ICAS)*	1854	1854	27,406
2.	Institute of Chartered Accountants in England and Wales (ICAEW)*	1880	1880	195,369
3.	Chartered Accountants Ireland (CAI)*	1888	1888	38,290
4.	Chartered Institute of Management Accountants (CIPFA)*	1885	1959	19,833
5.	Association of Chartered Certified Accountants (ACCA)	1904	1974	683,059
6.	Chartered Institute of Management Accountants (CIMA)	1919	1975	209,998

** Recognised qualifying and supervisory body for auditors*

*** Global- UK and oversees*

Source: author's compilation from document analysis

According to the Financial Reporting Council (2022) these six PABs altogether have over one million members and students worldwide and are influential globally. The UK accounting profession features significant engagement with other relevant institutions shaping accounting regulation, practice, education, and research. Consequently, describing and mapping sustainability in the PAE system encompass diverse actors operating in different roles and domains which will be elucidated in the next sub-sections.

5.1.1 System of PAE

The process of mapping the PAE system begins with identifying PABs as the focal actor in PAE provision, enumerating other institutions or groups needed for PAE provision at various levels, and ascertaining the stakeholders that influence PABs in their role as

providers of PAE[8]. On this basis, the system of UK PAE consists of the following nine actors: professional accounting bodies (PABs), universities, accounting students, accounting academia, professional tuition providers (PTPs), professional accountants and practitioners, employers (organisations and accounting firms), professional interest institutions, and the State.

PABs operate PAE by stipulating the entry requirements, IPD, and CPD for members. Entry requirements vary considerably since each PAB permits different entry routes ranging from the school leaving certificate, apprenticeship schemes, accounting and non-accounting degrees, affiliated degree programmes, and diplomas (CIPFA, 2017; ACCA, 2018; CIMA, 2019; ICAEW, 2019; ICAS, 2020a). A recent report by the Financial Reporting Council (2022) shows that more than 70% of student entrants for ICAEW, CAI, and ICAS in 2021 possess degrees. These statistics shows a different picture when only accounting degree entrants are considered, decreasing significantly to 27% for ICAEW and 45% for ICAS. Important for our purposes here, is noting that most accounting students in PABs are from non-accounting and finance disciplines (Financial Reporting Council, 2022).

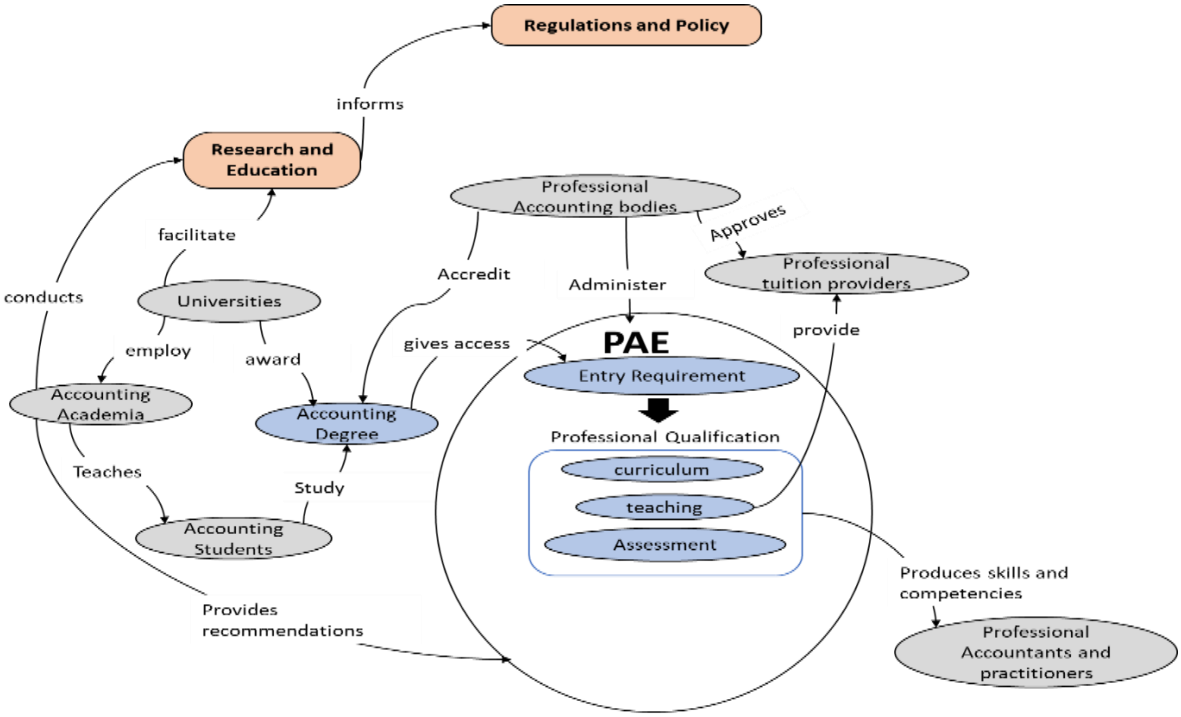
The accounting degree offered by universities is one of the common entry routes where accounting students study and receive education from an academic faculty before commencing their professional training (ICAEW, 2019; ICAS, 2020a). Accounting degree programmes intersect with professional training through accreditation processes that grant university graduates access to subject exemptions whereby they undertake fewer examinations when they join a PAB. Accreditations have become a common avenue for collaboration between PABs and universities since universities want to

[8] See appendix 2 for system mapping index.

improve the appeal of the accounting degree, and PABs seek to increase their membership from potential student cohorts (Ellington and Williams, 2017). Regardless, becoming a chartered accountant in the UK is determined by professional training more than academic degrees.

A closer examination of the role of academics and universities in the system reveals that the research they produce expands knowledge that can contribute to the decision-making of several institutions concerning changes in accounting regulations, practice, and education (Parker, Guthrie and Linacre, 2011; Duff, Hancock and Marriott, 2020). UK PABs have set up several schemes to sponsor accounting research with the aim that such research can offer insights and solutions into issues facing business and the profession (ICAEW, 2022; CIMA, 2022; ICAS, 2022). Figure 5.8 below illustrates the aspects of PAE map covering the entry requirements including accounting degrees, and the role of academics and universities.

Figure 5.8: System map extract I- pre-qualification and qualification phase of PAE



S/N	Features	Definitions
1.	Actors/Institutions	Relevant agents that operate within the PAE system and its environment
2.	Interactions	Relationships and connections between different system elements
3.	Education mechanism	Core functions and processes in the PAE system
4.	Influential domains	Other functional sub-systems of professional accounting

Source: author's depiction based on documentary analysis

As shown in Figure 5.8 above, there are three aspects of the professional qualification: curriculum/content, teaching/learning, and assessments. Usually, PABs develop the content and curriculum, which usually cover technical knowledge, work-based skills, ethics, and professional conduct (CIPFA, 2017; ACCA, 2018; CIMA, 2019; ICAEW, 2019; ICAS, 2020a). Professional tuition providers (PTPs) approved by PABs in the UK provide teaching as a separately packaged service (Kaplan, 2020). Outsourced teaching service is a shared feature in the professional qualifications of CIMA, ACCA, and ICAEW. Other PABs such as ICAS, CAI and CIPFA retain control over teaching their qualification or engage in joint ventures on teaching delivery (CIPFA, 2017; Chartered Accountants Ireland, 2020). Some PTPs also provide training services to employers seeking to upskill their employees. One tuition provider, BPP, claims to offer education

and training services to all Big Four accounting firms and 90% of FTSE[9] 100 companies (BPP, 2021), further demonstrating the relevance of these institutions to the education of professional accountants.

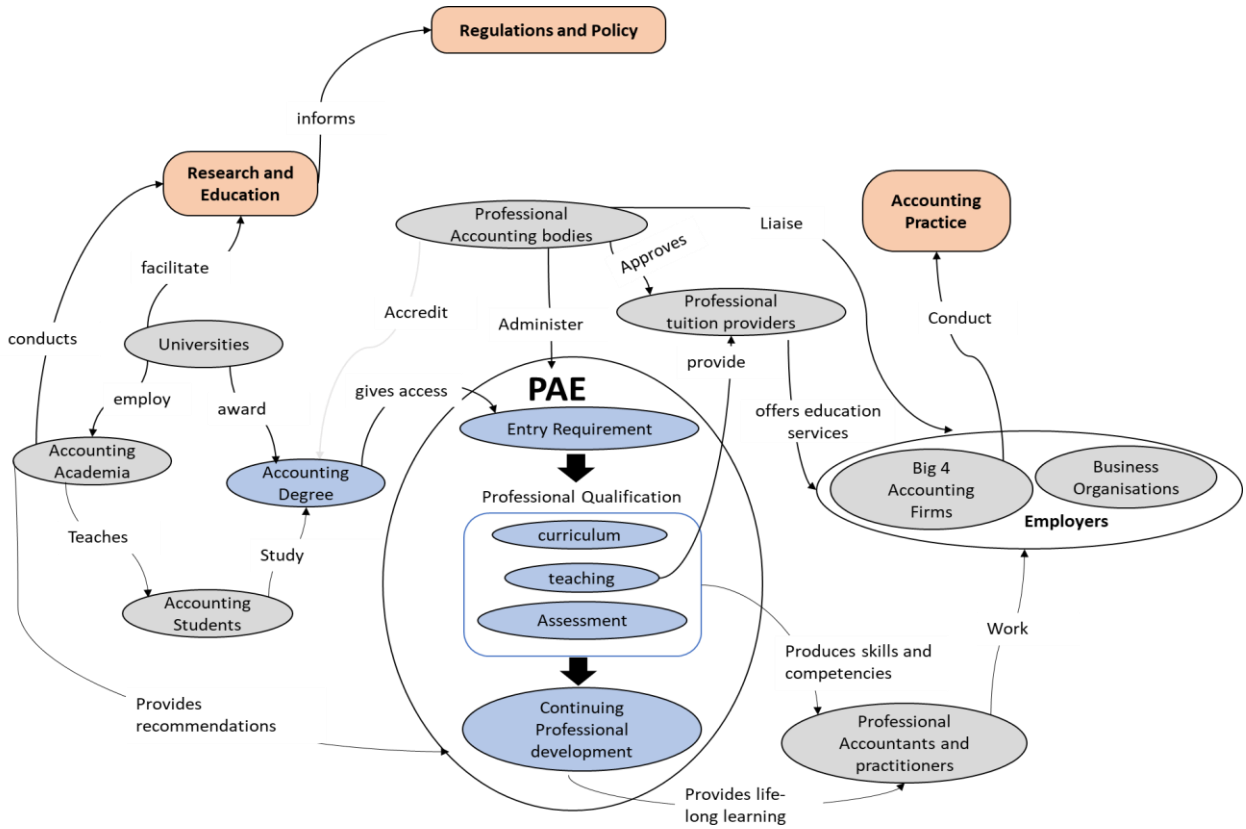
After completing all examinations, students must obtain work experience for a specified duration, usually up to three years, to be inducted as members of a PAB (IAESB, 2019). This process is designed to ensure accountants have the knowledge, competencies, and skills required for the workplace and accounting practice. ICAEW has a stricter standard that mandates students to have a training agreement involving them, the employer, the authorised PTP, and the student (ICAEW, 2019). In delivering the training expectations of accountants, PABs cultivate relationships with various employers, including the Big Four accounting firms, private and public sector organisations, the charity sector, and other relevant entities. More than half of UK professional accountants work in industry and commerce of which CIMA-qualified accountants are more likely to be employed in this sector (Financial Reporting Council, 2022). In 2021, over 75% of students and 35% of members in ICAEW, CAI and ICAS work in accounting practice (Financial Reporting Council, 2022, p.63), showing the significance of accounting firms as employers. In comparison, CIPFA has the highest membership and students from the public sector because that is the primary target for its qualification (CIPFA, 2017).

Professional accountants engage in life-long learning, update relevant skills, and gain new knowledge through CPD (Murphy, 2017; Paisey and Paisey, 2020). CPD is more than just post-qualification education and includes practical experience, networking, mentoring, observation and feedback, and self-development activities (IAESB, 2019). Although professional accountants take responsibility for their CPD obligations, PABs

[9] FTSE 100 companies are companies with the highest market capitalisation on the London Stock Exchange.

must actively engage and monitor members to ensure they meet the minimum CPD requirements (IAESB, 2019; ICAEW, 2022; ACCA, n.d; CIMA, n.d; ICAS, 2020b). Apart from PABs, employers, PTPs, or other educational institutions are often sources of CPD training and provide valuable resources so that accountants update their knowledge and adapt to changing expertise in the workplace. Figure 5.9 below illustrates the narratives about the work experience component of PAE, the role of major employers in PAE, and the post-qualification phase.

Figure 5.9: System map extract II – post-qualification phase of PAE



S/N	Features	Definitions
1.	Actors/Institutions	Relevant agents that operate within the PAE system and its environment
2.	Interactions	Relationships and connections between different system elements
3.	Education mechanism	Core functions and processes in the PAE system
4.	Influential domains	Other functional sub-systems of professional accounting

Source: author's depiction based on documentary analysis

Also included in the system of PAE are professional interest institutions such as accounting standard setters and professional coalitions who operate governance

frameworks and influence global norms and standards in the interest of the profession. Accounting standards were once limited to national jurisdictions; however, the inception of the IASB has enabled the harmonisation of accounting standards with over 170 countries, including the UK implementing the IFRS (IFRS Foundation, 2018). Likewise, IFAC exemplifies a type of professional interest institution responsible for international standards on accounting education, auditing and assurance, public sector accounting, and professional ethics since its establishment in 1977 (IFAC, 2011). IFAC's IES[10] is the most relevant standards to PAE and guides member organisations in administering PAE within their jurisdiction (IAESB, 2019). All UK PABs as IFAC members comply with IES requirements in designing and implementing their education programme (IFAC, 2020c).

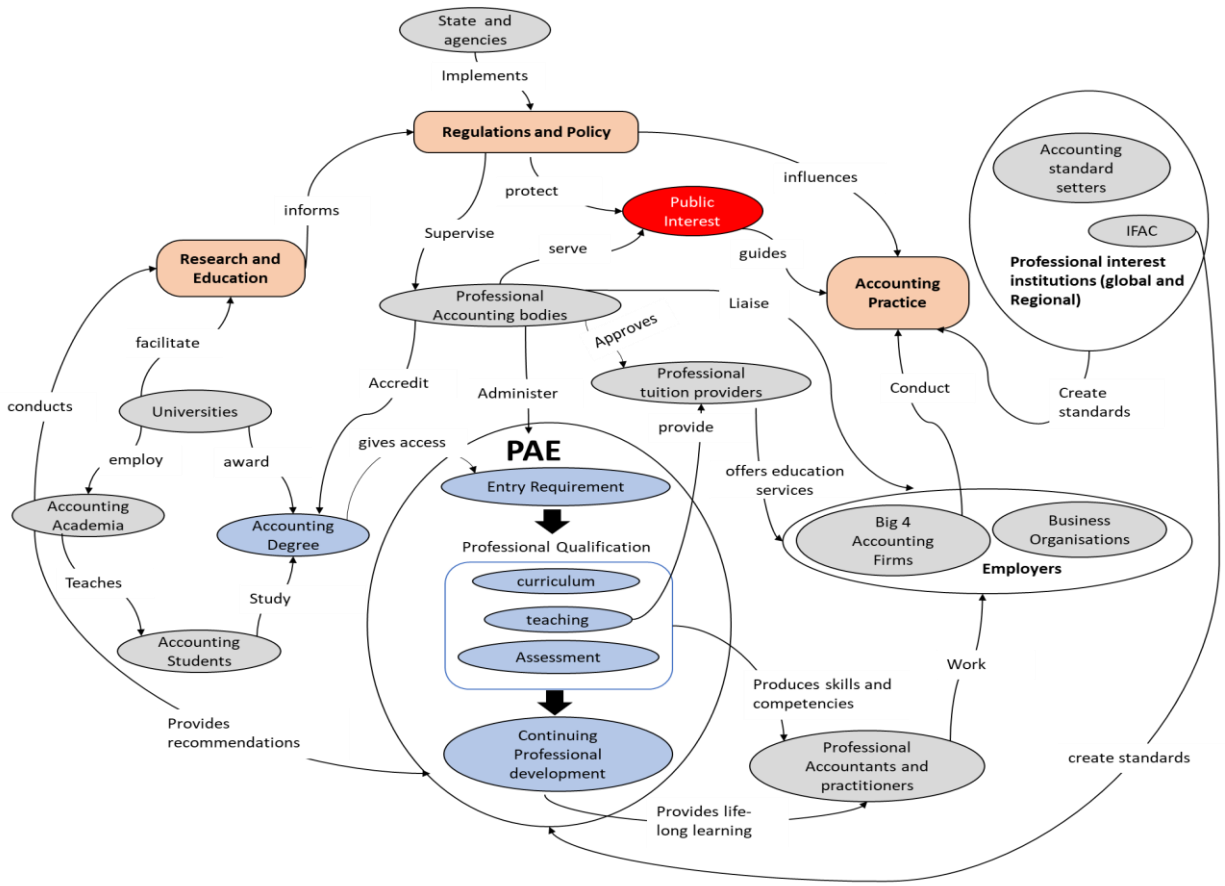
The State oversees the activities of all institutions in its jurisdiction, and in this context, it represents the ultimate foundation by which the accounting profession received status and legitimacy (Willmott, 1986; Lee, 1995; Sikka *et al.*, 2007). The State has oversight over the accounting profession through the Financial Reporting Council (FRC). The FRC directly oversees the UK accounting profession in the public interest, including monitoring the IPD and CPD for accountants, especially those qualifying to become auditors under the 2006 Companies Act (Financial Reporting Council, 2014; 2017). PABs themselves recognise the public interest as a central ideal guiding their activities in accounting regulation, practice, and education according to their charters. Also, the six main PABs constitute the Consultative Committee of Accounting Bodies (CCAB) and make submissions to the State and its agencies on policies and matters that affect business, accounting, and the economy, citing the public interest mandate. For example, the review of the UK stewardship code by the Financial Reporting Council in 2019. The interaction between the State and other institutions in the system emphasises the enforcement of laws

[10] Section 2.1.2 in chapter two of this thesis contains more details on the IES.

and policies and avenues for consultations and partnerships that shape these laws and policies.

Figure 5.10 below depicts the role of governance institutions discussed above and expands the previous figures (5.8 and 5.9) to detail the holistic system of UK PAE and the role of key actors discussed so far. Some actors are closer to the core of the process, such as PABs, universities, accounting students, accounting academics, PTPs, and employers, while others influence the overarching governance structures that affects PAE such as the professional interest institutions and the State.

Figure 5.10: System map III- governance institutions in the PAE process



S/N	Features	Definitions
1.	Actors/Institutions	Relevant agents that operate within the PAE system and its environment
2.	Interactions	Relationships and connections between different system elements
3.	Education mechanism	Core functions and processes in the PAE system
4.	Influential domains	Other functional sub-systems of professional accounting
5.	Public Interest	Central ideal of the accounting profession

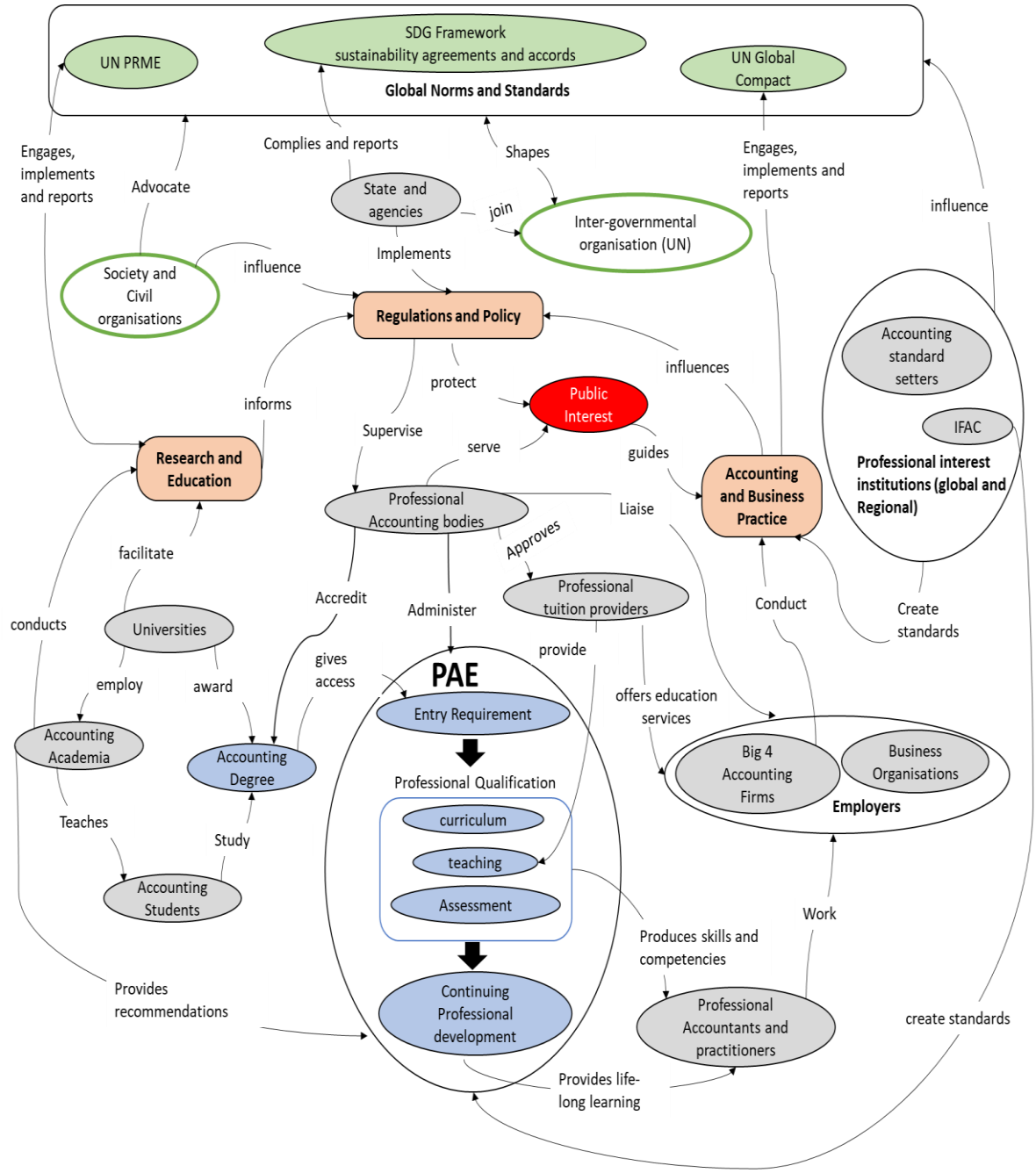
Source: Author's depiction based on documentary analysis

5.1.2 Mapping Sustainability in the PAE System

There are several justifications for sustainability becoming pivotal in the UK accounting profession and PAE system. For one, persistent pressures from civil society, activists, and researchers created the initial momentum on the importance of social and environmental issues and the imperative for business and accounting to be proactive on these concerns (Gray, 1990). The Accounting for Sustainability (A4S) project is one of the key initiatives that started in the UK in 2004, encouraging and supporting accountants to do their part in transforming business and accounting practices to build sustainable economies (A4S, 2021; Unerman, 2021). Furthermore, the endorsement of the UN 17 SDGs in 2015 promoted the accounting profession's interest and engagement with sustainability (United Nations, 2015). Therefore, mapping the materialisation of sustainability in the PAE system must include the role of the UN and civil organisations representing societal expectations that affect accounting. Although they may not directly influence PAE, the organisation's emphasis on the sustainability agenda influences what the profession does and the importance of sustainability literacy amongst accountants.

The adoption of the SDGs has led to accords and agreements among UN member states to translate the goals into implementation plans and measurable metrics with subsequent national reviews and reporting (United Nations, 2015, 2020b). The UK produced its first progress review in 2019, detailing its plans, partnership with stakeholders, and performance measurement process (Department for International Development, 2019). The 2022 SDG index report ranks the UK as one of the top-performing countries, placing eleventh out of 163 countries despite being on track to only achieve its targets on 5 out of the 17 goals (Sachs *et al.*, 2022). Figure 5.11 below reflects the manifestations of sustainability concern into the PAE system map particularly using the UN SDGs and affiliated initiatives as an anchor.

Figure 5.11: Mapping sustainability in the UK PAE system



S/N	Features		Definitions
1.	Actors/Institutions		Relevant agents that operate within the PAE system and its environment
2.	Interactions	→	Relationships and connections between different system elements
3.	Education mechanism		Core functions and processes in the PAE system
4.	Influential domains		Other functional sub-systems of professional accounting
5.	Public Interest		Central ideal of the accounting profession
6.	Sustainability initiatives		Elements of sustainability involvements

Source: Author's depiction based on documentary analysis

As show in Figure 5.9 above, apart from the effort of national governments, several institutions in the UK PAE system are connected to high-level SDG engagements showing their commitment and contributions to sustainability. For instance, three major UK PABs, large accounting firms, and numerous business organisations signed up to UNGC; and several UK universities are members of the United Nations Principles of Responsible Management Education (UN PRME).

Further evaluations of how the UK accounting profession approaches sustainability through the websites and reports of PABs showed that each define their role differently, but all have instituted actions towards the sustainability agenda (see Table 5.14 below). Their primary mode of impact is the production of thought leadership, resources and insights, and education and training of students and members, with integrated reporting, SDGs and climate change being key focus areas. UK PABs have been involved in sustainability matters for several years, but it is now a non-negotiable element of their activities anchored on the public interest (Unerman, 2021). For example since joining the UNGC in 2012, the ACCA has provided evidence of initiatives towards sustainability, including embedding sustainability matters in its IPD, offering seminars and workshops, publishing papers and insights, and raising awareness in conjunction with other stakeholders and initiatives (ACCA, 2015; ACCA, 2017; ACCA, 2019).

Table 5.14: Sustainability Initiatives of UK PABs

	ICAEW	ACCA	CIMA	ICAS	CIPFA	CAI
Role in the Sustainability agenda	Change behaviour to drive sustainable outcomes.	Help businesses and organisations realise the growing importance of sustainability and develop policies on sustainability.	-	Increase the awareness on sustainability issues and to formulate a position on matters of environmental sustainability to the business community and the wider public.	-	Build a more sustainable profession and businesses in all aspects of our work.
Mode of Impact	Publications and reports, education, and training, collaborative systems change.	Reports, research, tools and guidelines, education and training, and blogs.	Research and insight, case studies, education, and training.	Tools and guidelines, publication and reports, education & Training.	Publications and reports, conferences, and seminars.	Publications and reports, research, education, and training.
Featured Sustainability Issues	Natural Capital, integrated reporting, climate change, and SDGs.	Natural capital, integrated reporting, climate change, Human rights, and SDGs.	Natural capital, climate change, human rights, integrated reporting, and SDGs.	Integrated Reporting, climate change and SDGs.	Integrated Reporting.	Integrated Reporting, climate change, and human rights.
Advisory Group	Sustainability committee of 18 members from accounting firms, businesses, civil society, and academia.	Global sustainability forum of 16 members from accounting firms, academia, and NGOs.	-	Sustainability Panel consisting of 14 members from accounting firms, businesses, governments, organisations, and academia	-	Sustainability expert working group comprising 16 members from accounting firms, professional bodies, organisations academia, and NGOs.
Professional Qualification	Integration into overall competency framework and specific courses.	Inclusion of sustainability and environmental issues throughout the qualification.	Sustainability Integrated in subjects on organisational ecosystem and financial policy decisions.	Sustainability integrated into subject components such as business acumen, finance, and financial reporting	-	Integrated sustainability into the curriculum, with social responsibility, sustainability and Integrated Reporting as a topic area.
Continuing professional development	Continuing development programmes on sustainability.	Continuing development programmes on sustainability.	Continuing development programmes on sustainability.	Continuing development programmes on sustainability programmes.	Sustainability Conferences and Seminars.	Continuing development programmes on sustainability programmes.
UN Global Compact	Member since 2016.	Member since 2012.	Member since 2010.	-	-	-

Source: Author's compilation based on documentary analysis and websites of PABs

Additionally, each PAB except CIPFA and CIMA has a distinct advisory committee consisting of individuals from academia, the private sector, accounting firms, regulators, and non-governmental organisations (NGOs) to advise on sustainability issues (ACCA, 2020c; ICAS, 2020c; ICAEW, 2020; Chartered Accountants Ireland, 2020b). Most PABs have gradually introduced aspects of sustainability into education at the IPD and CPD stages. A review of the current curriculum of UK PABs indicates the integration of sustainability to varying extents, with most following a subject-specific approach in the areas of corporate reporting, business and strategy, ethics, and case studies. A distinct approach used by ICAEW (2019) is emphasising in its syllabus that sustainability is a holistic part of its competency framework, although sustainability could still be found in relevant subject areas. PABs are exploring more options and innovative approaches to expand the coverage of sustainability matters in PAE and ensure that accountants are equipped with the expertise to act on sustainability issues as demanded by various stakeholders.

5.2 The Nigerian Accounting Profession

Nigeria obtained independence from Britain in 1960 and has since charted its course through decades of political, economic, and social changes. The rapid growth in the number of foreign and indigenous auditing firms in Nigeria between the 1950s and 1960s led to the formation of the Association of Accountants in Nigeria (AAN) to advance the interest of the accounting profession in the country (Wallace, 1992; Parker, 2005; Uche, 2010). In 1965, the first PAB – the Institute of Chartered Accountants of Nigeria (ICAN), was formed through an Act of parliament to develop local business infrastructure, produce an indigenous workforce, and establish self-regulation over accounting practice (ICAN Act, 1965). ICAN imitated the English Institute - ICAEW and sought the assistance of the UK Overseas Accountancy Examination

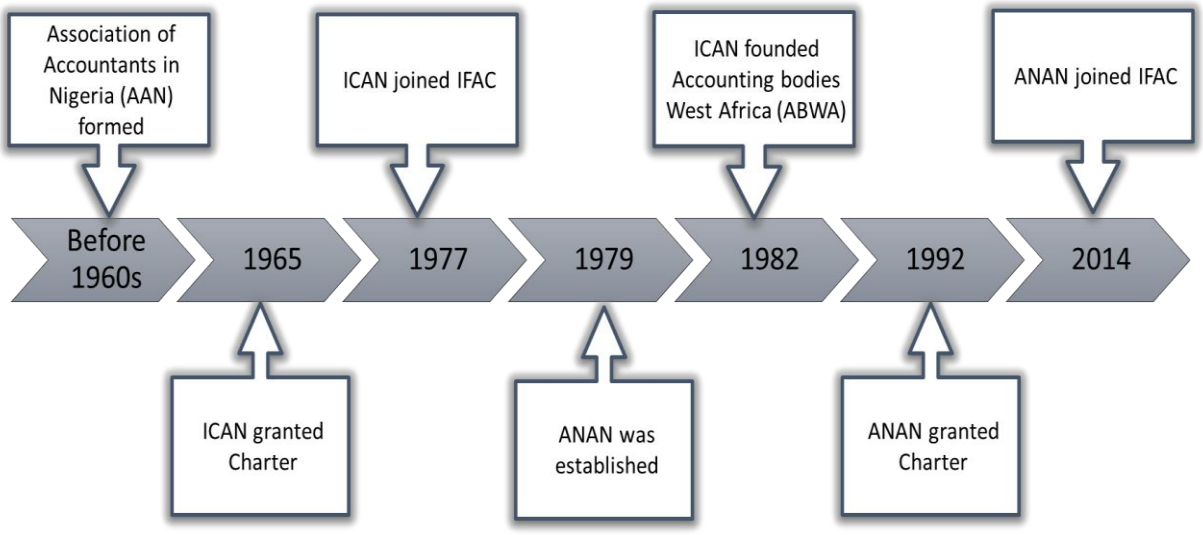
Advisory Board for the conduct of its examinations before taking control of the process in 1974 (Wallace, 1992; Uche, 2002).

ICAN was a founding member of the International Federation of Accountants (IFAC) in 1977, and it led the formation of the Nigerian Accounting Standards Board (NASB) in 1982 that developed, published, and updated financial accounting standards (Chukwunwike, Okeke and Chukwuani, 2018). The Institute maintained a monopoly over the production of accountants and the regulation of accountancy practice in Nigeria until the formation of the Association of National Accountants of Nigeria (ANAN) in 1979. ANAN members mainly comprised other UK professionals that were excluded from direct membership of ICAN except through examinations (Parker, 2005; Uche, 2010). Wallace (1992) argues that Nigeria's ethnic diversity has implications for the structure of its accountancy profession, and the failure of ICAN to represent the ethnic and regional diversity contributed to the opposition it faced.

At the regional level, ICAN was instrumental in creating the Association of Accountancy Bodies in West Africa (ABWA) in 1982 and later commenced the Accounting Technician Scheme (ATS) to produce a middle-level workforce in the region (Afolabi, 2016). Yet, its examination model was criticised for not producing the quantity of professional accountants needed for the growing Nigerian economy (Uche, 2002; Akhidime and Eriabie, 2013; Afolabi, 2016). Twenty-six years after the ICAN charter, only 4,300 candidates had completed the professional examinations and were admitted as members (Wallace, 1992). Based on these reasons, President Babangida, shortly before stepping down in August 1993, signed a decree recognising ANAN as a professional association (Uche, 2010; Afolabi, 2016). In 2014, ANAN also became a member of IFAC after two decades since it was recognised by law (IFAC, 2020a).

The forces shaping the Nigerian accounting profession include its colonial history, globalisation, and political interests. A fundamental change to the structure and regulation of the Nigerian accounting profession ensued from adopting the IFRS and creating a new oversight body known as the Financial Reporting Council of Nigeria (FRCN) in 2011. FRCN replaced the NASB with the responsibility of monitoring compliance with financial reporting standards and regulating the profession, which reduced the self-regulatory ambit of PABs in Nigeria (Herbert *et al.*, 2016). So far, the professionalisation history of Nigeria shows parallel lines of ascendancy involving the State and its agencies, contestation among professional groups, and affiliations with professional coalitions as depicted in Figure 5.12 below. Following this background, it will be useful to describe the structure of PAE and the emergence of sustainability in Nigeria.

Figure 5.12: Historical timeline of the development of the Nigerian accounting profession



Source: Author's depiction based on documentary analysis

5.2.1 Structure of PAE

Accounting Education in Nigeria is regulated by PABs in association with the National Universities Commission (NUC) and the National Board for Technical Education (NBTE) responsible for regulating the education standards of universities and polytechnics, respectively (Akhidime and Eriabie, 2013; Oladele, 2021). Table 5.15 gives an overview of the structure of PAE operated by Nigerian PABs.

Table 5.15: Structure of PAE in Nigeria

	ICAN	**ANAN**
Designation	Chartered Accountant (CA)	Certified National Accountant (CNA)
Total Members (as at 2021)	55,079	46,307
Minimum entry Requirements	Higher education qualifications or accounting technician scheme (ATS). Multiple entry routes based on accreditation.	Higher education qualifications accredited by national education regulators
Accreditations	Multiple accreditation schemes	None
Training Provider	Accredited tuition centres across the country	Nigeria College of Accountancy, Jos (in-house)
Initial Professional Development (IPD)	3 level of examination consisting of 15 subjects (can vary with exemptions granted)	2 levels or exams consisting of 12 subjects with additional conversion papers for non-relevant disciplines
Work experience	3 years (36 months)	2 years (24 months)
Continuing Professional Development (CPD)	Requires 30 credit hours per year	Requires at least attendance of 1 session per year worth 24 credit hours
Mutual Recognition Arrangements	Institute of Chartered Accountants of England and Wales (ICAEW) Chartered Institute of Management Accountants (CIMA) Chartered Institute of Public Finance and Accountancy (CIPFA)UK	Certified Public Accountants (CPA) Ireland
Professional Affiliations	Association of Accountancy Bodies in West Africa (ABWA)	

	Pan African Federation of Accountants (PAFA) International Federation of Accountants (IFAC)

Source: Author's compilation based on documentary analysis

Both PABs admit higher education qualifications (universities and polytechnics) as minimum entry requirements from relevant or non-relevant disciplines (ICAN, 2020a; Nigerian College of Accountancy, 2020a). ICAN's IPD framework mainly follows the UK apprenticeship model since many students are in active employment while undertaking professional training. The Institute also offers an alternative entry path through the accounting technician scheme for secondary school leavers operated jointly with other PABs in West Africa under ABWA (ICAN, 2020a). ICAN operates two accreditation schemes, regular student affairs accreditation covering 138 higher education institutions and advanced MCATI (Mutual Cooperation Agreement with Tertiary Institutions) accreditation with 27 higher education institutions (ICAN, 2019). The latter offers the maximum exemptions to graduates of accredited institutions as they only need to write the final examination level. Similar to its UK counterparts, ICAN sets the curriculum and examination procedures, but teaching is provided by licensed tuition centres across the country (ICAN, 2020b).

ANAN's IPD model differs significantly from ICAN as it administers professional training through the Nigerian College of Accountancy (NCA), Jos. ANAN does not yet accredit any tertiary institution, but it controls all aspects of its education, including curriculum, teaching, and assessment at the NCA following the education model of medical and law professions (Afolabi, 2016). There have been debates about which education framework is better for Nigeria. Akhidime and Eriabie (2013) criticised the ICAN model for its accreditation scheme because it reinforces the self-interest of the Institute in increasing intakes from undergraduate programmes and guaranteeing the employment of its members as part of the accreditation requirements. Afolabi (2016) commends ANAN's PAE approach because it runs an

independent training programme in line with professional expectations and standards. However, ICAN has gained more visible influence over accounting education in Nigeria through its accreditation schemes (Oladele, 2021).

Regardless of the debates, these PABs align their education structure to global best practices as members of IFAC and report their compliance to the provisions of the IES (IFAC, 2020b). Nigerian PABs also require post-qualification education in the form of CPD to build capacity and professional ethics, among other requirements. ICAN has a range of CPD offerings including in-house training for employers, but it mandates members to obtain a minimum of 30 credit hours of CPD each year (ICAN, 2021). Equally, ANAN requires its members to attend at least one mandatory CPD per year (ANAN, 2021). Both professional bodies have pursued and signed mutual recognition agreements with UK institutions such as CIMA, ICAEW, CIPFA, and CPA Ireland (IFAC, 2020b). These agreements show the enduring connection between the UK profession and former British colonies as they continue to expand their offshore membership after decolonisation (Poulloas and Sian, 2010).

International institutions facilitated the partnerships between Nigerian PABs and UK PABs as capacity development projects for the Nigerian economy. The World Bank sponsored a project to boost the institutional capacity of ICAN through a joint arrangement with ICAEW in 2012, while ANAN also partnered with UK accountancy bodies to upscale their education standard, sponsored by the UK Department for International Development (DFID) (IFAC, 2020b). The accounting profession in Nigeria has a strong affiliation with relevant bodies at regional and international levels.

5.2.2 Emergence of Sustainability

Nigeria has faced issues of ecological degradation and social injustice associated with oil exploration since the 1970s, which the Government has failed to effectively address (Disu and

Gray, 1998; Danedo, Thomson and Yonekura, 2019). While sustainability concerns resonate with the issues of ecological damage, human rights, and social justice, sustainability in Nigeria were translated into political priorities as the government adopted the SDGs in 2015 and reinforced regulatory requirements to institute sustainability practices in the economy. Nigeria has submitted two voluntary national reviews in 2017 and 2020, but recent indicators show that despite the Government's commitment to the SDGs there has been a decline in almost all areas and performance metrics (Sachs *et al.*, 2022). The Government has further made legislative efforts in the 2020 Companies and allied matters Act and the 2021 Climate change Act mandating consideration and reporting on sustainability matters within organisations (Adu, Dosumu and Randle, 2023).

Global sustainability reporting guidelines are relevant in Nigeria particularly in relation to Corporate Social Responsibility (CSR); however, local sustainability regulations have increased more recently fuelled by international pressure and investor drive (Okwuosa, 2020). In 2012, the Central Bank of Nigeria introduced the Nigerian sustainable banking principles that requires financial institutions to manage and disclose their social and environmental impacts (CBN, 2012). Further regulations have been initiated on sustainability, including the 2018 Sustainability Disclosure Guidelines for publicly listed companies by the Nigerian Stock Exchange (NSE), the 2019 Nigerian Code of Corporate Governance by the Financial Reporting Council of Nigeria (FRCN), and the 2021 Nigerian Sustainable finance principles introduced by the Securities and Exchange Commission which prescribes implementing SDG principles into public interest entities (Adu, Dosumu and Randle, 2023). Despite these regulations, a KPMG survey report (2022) found that sustainability governance is inadequate in Nigeria, most sustainability reports are not assured, and companies often downplay the environmental aspect of sustainability.

The accounting profession seeks to actively participate in the sustainability agenda through capacity building and awareness creation. Sustainability has been discussed at professional conferences and seminars, covering themes such as sustainable and inclusive growth, sustainable development, sustainability reporting, and integrated reporting (see ICAN Annual Report 2020, 2021 and ANAN Annual Report 2021). All the regulations discussed prior are incorporated into the education syllabus of PABs. ANAN has a separate module - environmental, oil and gas accounting that addresses sustainability (Nigerian College of Accountancy, 2021b), while ICAN incorporates sustainability in specific subjects such as business and management, corporate strategic management and ethics, corporate reporting, and the final case study exam (ICAN, 2020a). The two PABs in Nigeria have few initiatives on sustainability but acknowledge that the country's ability to achieve a sustainable economy requires the input of professional accountants.

5.3 Implications of Context

Professions worldwide are interrelated but conditioned by the differences in their legal, educational, social, economic, and commercial environments. The development of the accounting profession and the education of accountants in the UK and Nigeria have some similarities especially since many of the founders of Nigerian PABs were British-qualified accountants who brought British sensibilities to the formation of their indigenous institutions. Evidently, the similarities between the UK and Nigeria include professional structure, multiple PABs, entry requirements, and accreditation alliances. While acknowledging the general similarities in accounting profession of each context, one must also recognise the distinctions amongst PABs in the same country and how they approach PAE and sustainability.

Recognising the different settings for the accounting profession and PAE indicates that the avenues and conditions for sustainability integration will differ significantly. There are

differences in the level of economic development, degree of state control, and national education policy. Furthermore, sustainability articulated through the SDGs represents a common framework that is operationalised differently by context. Countries have varying SDG priorities which are ultimately reflected in the policies and performance metrics implemented at the country level and which diffuse to other institutions. The global profession represented by IFAC has also set its SDG priorities, so PABs must contend with contributing to the global goals as defined by national priorities and their professional interests.

Specific to research questions two and three, this chapter suggests that the structure of PAE within each profession offers distinct but interrelated avenues for integrating sustainability, and that actors will influence change to varying extents based on their role. These issues are germane to the empirical interests and propositions that will emanate from this research which will become evident in successive chapters.

5.4 Summary

This chapter details the background of the accounting profession, the PAE system, and the materialisations of sustainability within the two cases. The UK accounting profession has a long history, and its PABs have been resilient in adapting to changing expectations. Describing and mapping the UK PAE took a comprehensive system view that considered how other functional areas of the profession feed into the structure and process of PAE. The mapping clearly identified the role and position of each of the nine key actors in the system and how they might channel sustainability integration. To mention a few, PABs exercise direct control in producing professional accountants; employers can determine the worth of education based on their needs, the State and its agencies sets boundaries and expectations for accounting expertise, and professional interest institutions construct guidelines for educating accountants.

Sustainability in the UK profession and the PAE structure is well-grounded and has gained primacy because of the SDGs and decades of advocacy that predate the Global Goals. Several institutions are connected to various engagements on sustainability and SDGs, but UK PABs have become more proactive in raising awareness, producing professional insights, setting up sustainability expert committees, and providing education at IPD and CPD levels. All these activities demonstrate that integrating sustainability in the UK profession is underway.

The Nigerian accounting profession developed as Nigeria transitioned from British colonial rule to a sovereign State. The two PABs in Nigeria were instituted under different circumstances but are jointly responsible for controlling the production of accountants in the country despite their divergent approaches. The professional qualification stages are administered differently, as ICAN follows the UK apprenticeship model, whereas ANAN treats their professional qualification as higher educational attainment whereby students study at a central in-house facility. From the brief historical account of the Nigerian profession, it has developed from a prototype of the UK accounting profession to a regionally important profession.

Sustainability has slowly gained traction in the Nigerian context due to the SDGs, and state agencies have created several laws to conform with the global drive on sustainability requirements and reporting. The role of the accounting profession in sustainability and the SDGs is often understated as these PABs are at the awareness creation stage through seminars, conferences, and other CPD events. However, all local regulations and notable international sustainability accounting frameworks are included in the training curriculum.

While this chapter emphasised the document analysis phase of the research, the next chapters (6 and 7) focus on the interviews with relevant actor clusters from the UK and Nigeria respectively to resolve all four research questions. The empirical findings presented in the immediate chapter (Chapter 6) for the UK case interviews echoes the issues discussed in this

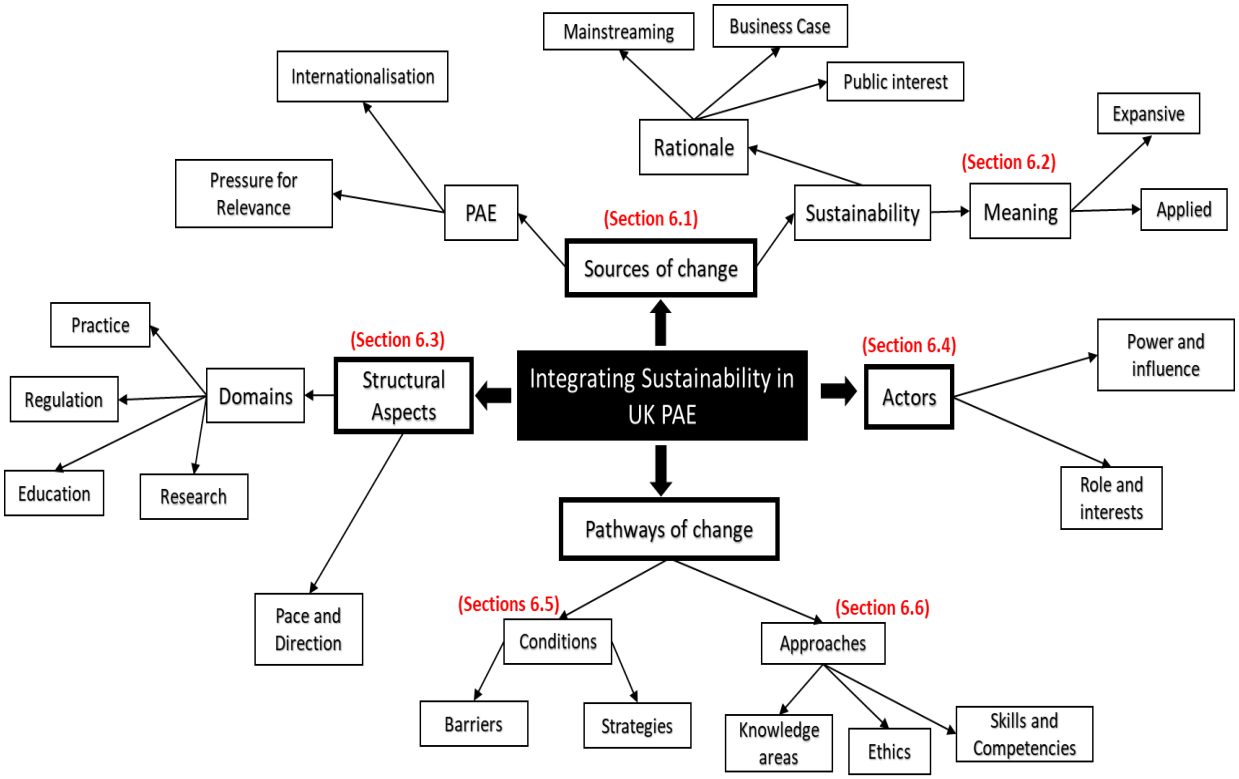
chapter and explores additional themes needed to deepen the understanding of the conditions and processes for integrating sustainability into PAE.

CHAPTER 6: UK EMPIRICAL FINDINGS ON INTEGRATING SUSTAINABILITY INTO PAE

6.0 Introduction

This chapter presents the empirical findings from the thematic analysis of interviews on integrating sustainability into UK PAE. The interview evidence shown in this chapter offers further exploration into the UK PAE system mapping elaborated in the preceding chapter (see Figure 5.4) and how elements of the system map affect the process of change. The purpose of this chapter is to narrate the insights from interviewees representing diverse groups within the professional accounting field and is a precursor to Chapter 8 where these insights will be analysed and discussed. The significant thematic areas emerging from the interview analysis are outlined in figure 6.13 below:

Figure 6.13: Main themes emerging from UK Interview Analysis



Source: author's mapping based on empirical evidence.

As show in Figure 6.11 above the UK empirical findings are arranged into six sections. Section 6.1 describes the drivers of sustainability in PAE, drawing on two themes, namely reasons for PAE changes and rationales for integrating sustainability into PAE. Changes in PAE in the last few years have been shaped by pressures and shifting expectations of professional accountants which are linked to the internationalisation of accounting education. These views coincided with the follow-up question about the rationale for integrating sustainability into PAE from which three main themes were found: mainstreaming, the business case, and the public interest. Next, section 6.2 shows the spectrum of sustainability views and interpretations expressed by various interviewees. The interpretations of sustainability provided in the interviews are dense and diverse but also depict how sustainability has developed within the UK accounting profession.

Thereafter, section 6.3 identifies the structural influences in PAE changes, including the influences of each accounting domain as well as the effects of pace and direction of PAE changes which provide supplementary evidence on the PAE system map (see chapter 5). Section 6.4 outlines the role of field actors, their interactions, and their actions towards integrating sustainability to explain the relational dimension of PAE change. The themes found in section 6.5 feature the barriers and strategies that condition sustainability integration in PAE. These themes are particularly important as they detail how elements of the profession can impede and enable change. Section 6.6 of the chapter provides an overview of the practical approaches to integrating sustainability into PAE; lastly, section 6.7 summarises the chapter.

6.1 Drivers of Sustainability in PAE

Changes in professions particularly their education structure are a part of how they evolve with respect to their role in society and how they channel their expertise into various knowledge areas. To understand the change process, it is essential to start with tracing the sources of change

which was covered in the opening part of the interviews. Therefore, this section characterises the drivers of change based on the viewpoints about the reasons for PAE changes and the motivation for integrating sustainability into PAE.

6.1.1 Reasons for Changes in PAE

Interviewees were asked to respond to the question: what has changed about PAE, and why have these changes happened? Two relevant themes from the response to these questions are the pressure for relevance and the internationalisation drive.

a) Pressure for Relevance

Interviewees noted that society has lofty expectations of professionals more than other occupational groups because of the ramifications of their expertise to public welfare. P01 characterises the awareness that professions are under pressure to change to maintain relevance and status:

> "There's a real struggle for professionals to justify number one, why they should exist, and number two, what they should study to remain relevant".
> (P01, HYB)[11]

Some interviewees (P01, P08, & P18) held similar views, namely that the changes in PAE are being fuelled by debate about the future relevance of accountants. The profession is concerned about the question of relevance with recent PAE changes targeted at rebranding accountants as indispensable contributors for progress in the new socio-economic era:

> "I think the drivers in terms of [the] syllabus are kind of around the changing role of accountants moving forward. And I think the professional bodies are really trying to prepare accountants for the future".
> (P18, HYB)

[11] Interview quotations are labelled by code name and the actor cluster they represent (see table 4.5 in chapter 4 for further details)

Findings revealed that there were specific topics inducing the pressure for relevance leading to PAE changes. Most interviewees (P01, P05, P07, P10, P11, & P15) identified sustainability and technology as core to recent PAE reforms. These issues were categorised as 'disruptions' that significantly drive what businesses do, unsettling the role of accountants and therefore needing the professions' attention:

> "You must be able to understand disruption however disruption is going to come, you must be able to understand technology because technology is a key determinant of what we are going to do, and then you must be able to understand sustainability issues, so these are the key things that are driving what businesses should do".
> (P01, HYB)

Regardless of the broader issues affecting society or business, the profession is more inclined to act on issues that directly impact its role and status. Proximate interests determine PAE changes as was the case with past professional knowledge expansion (Lee, 2013), in that issues that appear more threatening to the profession, take priority in education standard setting over others that may be socially important:

> "We were always looking at what are the problems facing the accounting profession, not what are the problems facing society. […] I think there have been some bigger issues on the horizon around audit scandals and the whole digital agenda".
> (P18, HYB)

b) Internationalisation Drive

Interviewees widely acknowledge the influence of international mobility of accounting labour as an essential consideration in producing accountants thar are less restricted by national boundaries. Reciprocal arrangements have become a widespread practice among UK PABs, as one interviewee explained:

> "There are education frameworks around the world where our qualification is recognised. We have partnerships with different country organisations, […] so that if somebody

qualifies with their qualification [from another country], they can become members of ours and the reciprocal arrangement exists."
(P10, PAB)

On a macro level, global platforms have emerged among professional bodies specifically to enforce cross-border interconnectivity and ensure the mobility of the accounting workforce through education:

"One of the things which [we are] involved with is something called the common content project […], and the idea is that we have certain elements for our syllabus in common […] it will help accountants be able to move from one country to another should they wish to work in a different country."
(P15, PAB)

The professional networks are often supportive and collaborative in terms of what they seek to achieve beyond the capacity of a single PAB. The aim for the profession is to establish a global rule applicable in all jurisdictions that minimises the contextual issues:

"I think the bodies understand that that you could have a rule that would seem to fit for the UK. It might fit for Europe, but it wouldn't be a global rule. It wouldn't be very good. And so, a lot of the stuff in the last 20 years is dominated by [the] global marketplace."
(P19, HYB)

6.1.2 Rationale for Integrating Sustainability in PAE

The previous sub-section indicates that pressure can shape the issues that become a priority in PAE, even if the profession does not initially consider them as important. Since '*Pressures in PAE can be on and off*'- P01, external pressure is not always continuous but can intensify or decline with time. Intensified societal pressure about sustainability, directly and indirectly, obliges the profession to consider the role of accountants on these issues:

"We were not or have not been until more recently under a huge amount of pressure to do something about [Sustainability], [….] we have to pay attention to that pressure directly because we are in society, we are hearing it, and we are seeing that things will

> get to a stage that if we don't do something about it, it will be too late, that's number one; but we are also experiencing it indirectly because that pressure is being felt by organisations".
>
> (P01, HYB)

Responses to the question about the motivations for integrating sustainability into PAE were interrelated but were categorised into three broad themes during the analysis: mainstreaming, business case, and the public interest. These themes were coded directly from the statements of the interviewees, but a similar language has also been used in the literature on sustainability accounting to make the case that sustainability matters to business and accounting.

a) Mainstreaming

The mainstream argument is a reoccurring standpoint of many interviewees (P03, P09, P12, P14, and P18); one of whom expressed that:

> "I think the whole talk about sustainability has become much more mainstream".
>
> (P18, HYB)

Mainstreaming implies that an issue has become part of the widely accepted norms, conventions, and practices of social-economic life. The process of mainstreaming can also be characterised as the institutionalisation of sustainability in accounting practices (Larrinaga and Bebbington, 2021), so that it is accepted as the best and customary conduct (DiMaggio and Powell, 1983; Leicht and Fennell, 2008). In describing the mainstreaming of sustainability within the profession and in PAE, one interviewee commented:

> "Those things that we call sustainability have become very mainstream, and as it becomes mainstream, they will almost cease to be called sustainability. So, we are in this strange phase and have been for a few years now where we're transitioning from things that look unusual to those things now looking usual".
>
> (P03, PAB)

As a result of mainstreaming, it has become clear that the consequences of sustainability are

far-reaching to the extent that it will ultimately affect the functioning of business and accounting. Another way of articulating the mainstream notion was the 'trickle down' effect of an obligation to address sustainability in all spheres of socio-economic activities:

> "So, because [sustainability] is going to become kind of mainstream, certainly for the largest organisations, and then through the supply chain and other kinds of relationships. It will start to filter and trickle down".
> (P14, PAB)

b) The Business Case

The mainstream position was repeatedly linked with the business case for sustainability in several interviewees' responses (P03, P09, P14, P12, & P19). Accountants have a role in sustainability since businesses now require transitioning their business operations to guarantee long-term survival. PABs have been able to make this argument clearly:

> "One driver is that we as an institute absolutely believe that business success depends upon the successful planet, a thriving natural environment. So, our members are all about business success and if we want business to be successful, we've got to understand the relationship between business and nature, and societies and nature or economies and nature."
> (P03, PAB)

The business case is used in the managerialist literature on sustainability accounting to convince business and accountant of their role in this agenda (Schalttegger and Burritt, 2010). Another use of the business case from the interviews is that accountants must prioritise the market for their service and expertise:

> "Anything that impacts on business will impact on the professional bodies. And the professional bodies like to be seen to be ahead of business if they can, because that's another reason why [sustainability is] important".
> (P19, HYB)

The business case is faced with criticisms[12], as one interviewee seemed less optimistic about it and used the term 'unfortunately' to describe the market imperative for sustainability:

> "The motivating factor for the accounting profession, unfortunately is always how the market develops".
> (P12, HYB)

c) The Public Interest

Even though the public interest is the crucial argument in the literature for the integration of sustainability in PAE (Gray and Collison, 2002), it appeared as an outlier in the discussions and was only mentioned by a few interviewees (P03 and P13). For PABs, using the public interest as the avenue draw in sustainability means paying attention to wider stakeholders:

> "There are stakeholders, which is the public interest, saying you've got to do something about [sustainability]."
> (P03, PAB)

Another interviewee (P13) notes the importance of the public interest but opines that it may be less appealing because commercial and business interests still take pre-eminence for the profession:

> "One [reason] is having regard to their public interest obligations. I suspect that's not a larger part of the motivation, but I would hope that might be."
> (P13, ACD)

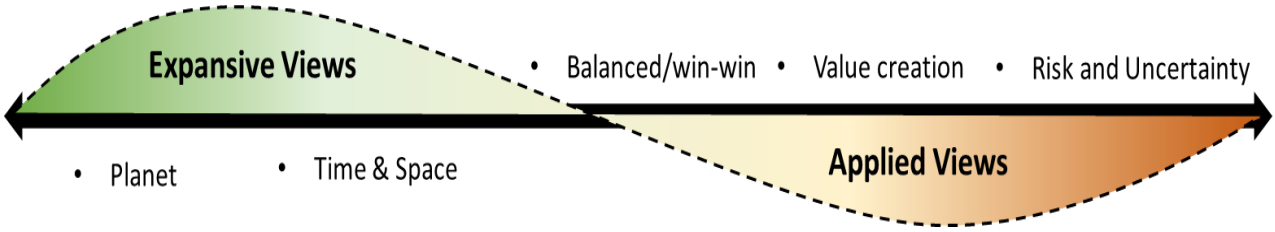
In summary, the rationale for sustainability does not have equal weightings in the interviews, again reflecting how change is prioritised based on different reasonings and pressures. Mainstreaming is often linked with the business case while the public interest was rarely emphasised.

[12] See section 2.3.1 in chapter 2 for criticisms of the business case for sustainability.

6.2 Views and Interpretations of Sustainability

Exploring the meaning of sustainability is crucial to uncovering the ideas and mindsets informing the integration of sustainability in PAE as the discussions in Chapter 2 has shown that there are different meanings attached to the concept. Interviewees expressed diverse interpretations of sustainability, with some combining multiple ideas to form a single definition. Their intersecting responses are characterised as a continuum ranging from an expansive view beyond the accounting knowledge space to more applied interpretations grounded in accounting and business terminology as illustrated in Figure 6.14 below.

Figure 6.14: Continuum of sustainability interpretations among interviewees



Source: author's depiction based on empirical analysis

6.2.1 Expansive Views

The expansive view of sustainability takes a social-environmental approach to describe the concept whilst focusing on the grand scale of sustainability and its broader implications for society. Themes from this view describe the human dependency on the planet and nature and the way to guarantee equitable states of human existence both in the present and the future.

a) Sustainability of the Planet

Some interviewees (P03, P07 and P15) believe that sustainability is about the planet, nature, and the environment. Planetary interpretation of sustainability encapsulates the primacy of nature as the bedrock of social and economic sustenance:

> "Fundamentally, it's about showing that economic and social success depends upon a successful natural environment […]; there are no economies, there is no society on a dead planet".
> (P03, PAB)

As such, humans are responsible for the environment and must demonstrate accountability for their interactions with it. Some interviewees shared the view that the focus on the environment sometimes de-emphasises the economy and society in the narrative. The meaning of sustainability has gradually progressed into a more inclusive understanding of the interaction between nature, society, and economy:

> "When I hear sustainability, I kind of immediately think of environmental issues, but clearly, it is a lot more than that; you do have to think about the economy behind the scenes and then also thinking wider in terms of society."
> (P15, PAB)

b) Sustainability as Time and Space

Time and space interpretations of sustainability acknowledge that the planet is interwoven with human considerations and interests:

> "[Sustainability] has two sides to it, it is a cross-sectional at one point in time issue […] so you are sustaining everybody in a particular space and ecosystem and at the same time, and then it has a time or a temporal stuff […]; the strategies to ensure that both forms of spatial and temporal or inter-temporal intergenerational co-existence will take place".
> (P01, HYB)

The concern of proponents within this view includes issues such as the planet's survival, co-existence of species, and intergenerational justice:

> "I would define it as a way of operating in the world, be it at an individual, organisational, or nation state level that provides social justice both within current inhabitants and across generations and takes account of impacts of activities on the environment, and the ability of the planet to sustain life, not just human life."
> (P13, ACD)

Sustainability as time and space resonates with the idea of sustainable development in public discourse as described by the Brundtland Report (1987) and instituted in the SDGs. As such, some in the profession recognise this:

> "We use the Sustainable Development Goals to explain sustainability."
> (P03, PAB)

6.2.2 Applied Views

The applied view of sustainability emphasises issues relating directly to business organisations and accounting. As one interviewee remarked:

> "If you get your sustainability planning right, you will get your economics right, and, it's profitable to be sustainable. There isn't a conflict of interest in this."
> (P10, PAB)

Interviewees supporting this understanding (P09, P11, P12, P16, and P17) use terms such as risk, value, and capital to clarify what sustainability represents. It can be challenging to delineate these concepts because of their common usage in making the business case for sustainability which is a major rationale for its integration in PAE as earlier discussed. For the applied perspective, three sub-themes are identified from the statements of interviewees: risk and uncertainty, balancing/win-win, and opportunity/value creation.

c) Sustainability as Balancing or Win/Win

The balanced view of sustainability is a merger of environmental, social, and economic interests intersected in a Venn diagram to illustrate incorporating sustainability into business and socio-economic practices. Accountants should work towards sustainability in these three dimensions:

> "[Sustainability] is that kind of societal, environmental, and also the economic impacts; so people, planet, and prosperity are the few things that kind of sum up sustainability for me. And all three need to be achieved for us to maintain our ability to sustain ourselves and in the long term and to survive. So, it's a kind of like a Venn diagram with the three circles; they overlap quite a bit.".
>
> (P14, PAB)

The win-win framing of sustainability offered a less threatening view of sustainability to companies while encouraging social and environmental responsibility towards stakeholders. It is acknowledged that businesses' contribution to society and the planet ultimately benefits their going concern.

> "I don't have the kind of concrete definition of sustainability, but I think it's more like the balanced way of how to make like company, society, environment, and people actually live together".
>
> (P07, ACD)

A balanced interpretation of sustainability moved the concept beyond the environmental focus by embedding social and economic variables. This balanced view may have become less relevant as only a minority of interviewees expressed it. It is also difficult to ascertain how to balance these three aspects because they do not necessarily have equal value even among those sharing the opinion that they are interrelated.

d) Sustainability as Opportunity/Value creation

Interpreting sustainability as an opportunity for value creation suggests an advancement from the balancing/win-win view. This definition deviates from businesses being responsible for

their impact on the environment and society and takes root in a positive mindset that sustainability creates new business opportunities:

> "It's long-term value creation on economic, social, and environmental aspects, and that you try to create value and sustain value and minimise or prevent negative impacts, […] Sustainability as responsibility, has a negative connotation because I think I can be liable for something, […] but by having the positive value creation and linking it to innovation, you get a completely different mindset"
> (P12, HYB)

The value creation perspective is widespread in the profession based on interviewees' responses. Many proponents (P10, P11, P12, and P16) suggested that companies can embed sustainability as a strategic goal that will benefit them while also benefiting society, which is the typical reasoning in the business case for sustainability. One individual in this group remarked:

> "We would probably look at [sustainability] through resources and we would say it is now of benefit to an organisation ethically or from a position of the longevity of the business because we have to tie it back to value because value is the business world."
> (P11, PTP)

Value can be heavily focused on the company/entity, its interest and its longevity, which has greater relevance in the accounting space than using the word 'sustainability' more broadly. Still, there is a challenge in delineating for whom this value is being generated, society, the environment, or the owners of businesses. Such questions create contentions:

> "We define sustainable business rather than sustainability. So, we define it that organisations are considered to be successful when they generate profits, but they do it whilst also operating within the environmental boundaries of the planet and creating value for society. We did have some debate interestingly about whether you swap those two around."
> (P16, PII)

e) Sustainability as Risk and Uncertainty

Risk is a concept that accountants can easily comprehend because financial risks are already part of what accountants confront in business and practice. Using risks to articulate sustainability challenges is an emerging view whereby businesses can assess their risks and act to address them. This statement from an interviewee exemplifies how risk fits with sustainability:

> "It's about being objective in assessing [sustainability] risk; so, for [an accountant] it does matter, if it looks like it's going to affect your business resilience and your business model, it needs to be defined as a risk and go through the enterprise risk management".
> (P17, PAB)

Still, it is uncertain whether the risks associated with sustainability can be averted, managed, or tolerated. Promoters (P10 and P17) of this definition reinforce the notion that sustainability should be about managing responsibilities and threats. In addition, sustainability through a risk understanding fits into accounting education:

> "Risk management and sustainability go together. […] So, looking at what you do from a risk perspective and saying, and looking at sustainability issues at the same time will actually help your organisation grow more responsibly and last longer and carry on being a going concern."
> (P10, PAB)

Overall, the interpretations of sustainability discussed above echo some of the rationales for its integration into PAE and sets the scene for examining other crucial factors influencing PAE and the process of change.

6.3 Structural Issues in PAE Change

Examining the structure of PAE holistically draws on CAS literature (discussed in Chapter 3) whereby it is characterised as a sub-system of professional accounting which also includes

adjoining sub-systems of practice, regulation and research[13]. As a result, the subsequent mapping of the UK PAE system in Chapter 5 enriched the descriptions of the interconnections among the four functional domains of accounting using documentary data[14]. Based on the insights from interviews, this section further analyses the influence of these structural elements and interconnections defined in the PAE system map. Likewise, interviewees offered added insights into the significance of pace and direction of change in explaining how these structural elements take shape within the profession.

6.3.1 Influence of Professional Accounting Domains

The functions of each professional accounting sub-systems are well-established from the interviewees' perspective. A recurrent theme was that changes in regulation, practice, and research feeds into integrating sustainability in the education domain. However, the literature cautions that there is a gap in the interaction these accounting domains (Lee, 1989), so that the expected effects that would appear seamless in a system map could differ from the actual outcomes articulated in the experience and knowledge of interviewees.

a) Regulation

State agencies control the regulatory domain through laws, directives, and policies that permeate every other subsystem. Regulation through the State is the most compelling influence for the integration of sustainability:

> "With the Government's desire to see a green industrial revolution, that will feed through to regulation which will drive change."
> (P03, PAB)

[13] Figure 3.3 in chapter 3 elaborates these domains of accounting and their functions which are relevant to the findings presented here in this chapter.
[14] See Figure 5.4 in Chapter 5 for a full depiction of the PAE system map which also includes the other sub-systems of professional accounting.

> "If legislation comes about organisations disclosing to some measure their carbon footprint […] I can bet you that professional bodies will start learning how to do it and asking people to do it".
>
> (P01, HYB)

Apart from the State and its agencies, other quasi-regulatory institutions can enforce rules that pressurise institutions to recognise sustainability more extensively. For instance, a recent reporting framework on climate change backed by governance institutions has had a significant impact on the accounting field as a whole:

> "The requirements for example by the Taskforce on Climate-related Financial Disclosures […] would feed through to professional advisers and to accounting bodies to recognise that they need to become proficient and cognisant of what the [sustainability] issues are and be able to advise their clients and help organisations address these issues".
>
> (P13, ACD)

Interviewees raised concerns about the role of regulations in driving integration of sustainability in PAE because it takes considerable time for policies and standards to act on needed changes. If the system solely depends on regulatory mandate on sustainability issues to create change, then the transitions needed will be slow to emerge:

> "Standard setting is often very far behind practice; it's reacting to things in the market, rather than being on the front foot and getting ahead of it."
>
> (P21, REG)

b) Practice

Accounting practice defines the exercise of skills, duties, and expectations of accountants in many types of organisations from which norms, identities, and rules of conduct are formed and reproduced. Several interviewees shared the view that practice is ahead of education. To further explain the lag between practice and education, one interviewee recounts their experience in accounting practice:

> "And from personal experience, a lot of what I've studied, I've probably not really put

into practice, so practice might have evolved since then, but I think practice is really what then makes you become an accountant".

(P21, REG)

Accounting education did not always translate into practice because change occurs faster in the practice domain. As it pertains to the actions of PABs, another interviewee explained the lag between education and business practice and stated:

"Most [PABs] look at the current needs of employers, and have forgotten about the fact that when you are training somebody, it will take some time for that person to acquire the skills and competencies, by the time they have the skills and competencies, employers might have moved on, so there's always a lag in there".

(P01, HYB)

Therefore, the consensus regarding the influence of practice on sustainability education was that education trails the direction of change in practice:

"Basically, if practices are changing then the education needs to then keep up with the changing requirements of what is going on in practice."

(P18, HYB)

c) Research

Research is an integral part of the field held together by accounting academics and sometimes in collaboration with PABs. Research generates new knowledge for accountants, which is at the core of thought leadership, bringing foresights into the profession:

"Professional bodies would normally commission research from academics and other people for two reasons; first almost altruistically [because], they've got to be able to support what we are doing, but secondly purposively because they know that these guys can tell them [about] new knowledge that is coming and therefore, they're interested in that kind of knowledge in order to update themselves".

(P01, HYB)

From the analysis, there is a strong correlation between the research carried out by accounting academics and accounting education at the academic level. Still, there is a gap and disparity in the application of research in the practice domain:

> "I think the combination of research and teaching is very important […] we haven't used much in practice from all the research that has been done, and it's a pity".
> (P12, HYB)

The gap between research and practice is the reason why the profession and practitioners are primarily interested in research with policy implications as explained by an individual with experience in the professional and academic fields:

> "Through research, if you want to have an impact, then you will have to answer at least the so what policy implication and arguably the so what practice implications because that's where the professional bodies are interested".
> (P01, HYB)

Research is acclaimed as a source of innovation, yet its innovations do not easily translate to other fields outside education. Another interviewee expressed the view that research needs grounding in business practice to be considered teachable and adaptable to professional knowledge:

> "It's about being able to translate from the academic stuff that they do and turn to what they call real teachable stuff. The important part is how do we ground that, and that's how the best models get adapted."
> (P08, PAB)

d) Education

Education is a prominent element of an established profession and PABs are responsible for the core aspects of accounting education. The main challenge with the education domain is that it is often conservative. Instead of anticipating the skills and expertise that would be required by organisations, PABs are more focused on current trends:

> "The accountancy education should be proactive and should look [at] how the world [will

be] like in 2050 or ’40, and what does this mean for education. A lot of [PABs] respond to what they see right now in the market”.
(P09, HYB)

A recurrent theme amongst interviewees was that education depends on interactions from other domains in accounting, which has significant implications for sustainability integration. An interviewee from a professional-interest institution describes education as ‘backwards’ because it caters to retroactive demands:

> “There’s a real risk that education is backwards facing, particularly when you’re an accountant because you look back to the last financial year, right? And there needs to be so much more about looking forward, and knowledge about that strategic element”.
> (P16, PII)

To summarise the interactions of the domains based on the analysed themes: regulation and practice are the most compelling forces of change; innovations are created in the practice and research spaces but typically incongruent because of the lag between research and practice; research shapes academic education but must be translated to have a significant effect on the crucial aspects of PAE, and education changes based on input from the other sub-systems.

6.3.2 Pace and Direction of Change

Issues of pace and direction of PAE changes were evident in discussions on the interaction of professional accounting domains. These concepts also resurfaced in response to questions about the recent changes in PAE and the process of implementing sustainability in PAE. A few interviewees thought that pace was a distinct form of change happening in PAE because of external pressure:

> “Nothing had changed for quite a while and then about two years ago, we introduced a brand-new syllabus. And the pace of changes is picking up exponentially. We are a lot more responsive to kind of the pressures which the professionals are finding themselves under […] with the pace of change what you’re going to need to learn or relearn is going

to keep changing over time."

(P15, PAB)

The pace of change is a factor that can signal the drive for integrating sustainability in PAE. There is a struggle for the education system to be up to date with the pace of sustainability in other domains of regulation and practice:

> "It's kind of quite difficult at the moment because the [sustainability] landscape keeps changing and a professional accounting qualification syllabus normally last between two to five years, so it's moving so fast that if you put something in, it's going to be out of date by the time it's examined".
>
> (P17, PAB)

Interviewees described change in PAE as either fast or slow. Like any other transition process, there are periods of fast and slow change in responding to how sustainability will shape the PAE field. Though the motivation for sustainability in the profession and PAE has been developing for decades, the drive towards a cohesive framework in the profession only materialised more recently:

> "I think this is really very important, so you just have to realise that the development goes slowly, eventually you come now at a tipping point".
>
> (P12, HYB)

Equally, the direction and sequence are important factors in understanding the patterns of change, also known as the linearity of change (Zietsma et al, 2017). Responses revealed that change happens in multiple directions in accounting because various actors simultaneously address the same problem in their own domain:

> "I think it's a pincer movement. I think there's no one solution. And I think what we try and do is we try and do top-down and a bit bottom-up".
>
> (P16, PII)

There are multiple channels and approaches for sustainability transitions, and a single direction change sequence will forestall the pace of change and the implementation of sustainability transition. One interview articulates the connection between pace and direction in the statement:

> "It needs to be in multi-directions, not just the root up, […] I think like changing from the root in a single direction might not be fast enough".
> (P07, ACD)

Statements on pace and direction of change indicate that actors are aware of the existent pathways for integration of sustainability in PAE. The next section explores how this awareness applies to the actors in PAE.

6.4 Relational Issues in PAE Change

Actors in the UK PAE have diverse interests, perform distinct roles, and interact to shape the field in many ways, as detailed in Chapter 5 of this thesis. Two interview questions further explored the role of actors and their relational dynamic, asking: which stakeholders are involved in the structure of PAE, and how do they influence integrating sustainability into PAE? Emerging themes from the relational dynamic among diverse actors were relevant in two broad areas. First, the views about actors' roles and interests in PAE and the implications of power and influence, their interactions with sustainability integration in PAE.

6.4.1 Role and Interests of Diverse Actors in PAE

Interviewees identified PABs, accounting firms, employers, universities, accounting academia, students, professional tuition providers, the state, and professional interest institutions, as key actor clusters in the structure of PAE which correlates with the PAE system map. The comment below broadly echoes the view amongst interviewees about the most fundamental constituents in PAE:

> "If you look at the relational issues in terms of professional education you have four groups of people coming to form an immediate relational dynamic, so the first obviously

> is a professional body, […] and then you have the students who wants to study, and then you have the employer who would employ the student or the qualified professional accountant to get a benefit of the services of that accountant which embodies their knowledge, skills, and competencies, and then you have other educational institutions that enter into the framework."
>
> (P01, HYB)

Some interviewees distinguished the role of certain actors exercising oversight and influence over the accounting profession, including the State and affiliated regulatory agencies as well as professional interest institutions:

> "You've got like your governing bodies; for example, IFAC through the education standards, you will also have other regulatory bodies like the Financial Reporting Council, you've got government through legislation".
>
> (P18, HYB)

The sub-themes in this section are based on the specific actors identified and discussed by the interviewees.

a) Professional Accounting Bodies

PABs are at the centre of the accounting profession and possess legal backing to exercise autonomy over professional affairs and represent the collective interest of the professional group. Several interviewees describe the role of PABs in setting the boundaries of professional knowledge and competencies with absolute rights to admit a person into the profession. So, the reputation and external legitimacy of the profession is at stake with respect to the accounting qualification:

> "For any designation, the gatekeeper's the Institute. […] They're the ones whose reputation is on the line based on the quality of [chartered accountants] in the country".
>
> (P21, REG)

There is also an obligation for PABs to maintain the PAE standards in the interest of qualified members as the comment below illustrates:

> "We also have an obligation to [our members] to maintain the standards of qualification so that we don't admit members to the profession who are substandard. And they would expect that because they have a vested interest having qualified themselves."
> (P10, PAB)

PABs in the UK each independently administrate their education programme through two main levels: professional training and post-qualification education. One interviewee commented on the variation among the PAE frameworks:

> "In the UK, we have quite a lot of choice of what kind of accountant we want to be and what kind of qualification you therefore go for. And the entry requirements are different and the outcome's different, whether you want to be a management accountant or chartered accountant or accounting technician."
> (P16, PII)

There are some differences in their qualification process amongst PABs. Some have complete oversight over the education/training process, while others outsource aspects of the education process. Consequently, UK PABs are not equally involved in education programmes. Yet, some interviewees (P06, P16, and P19) expressed concerns regarding PABs becoming more similar over time with less status differentiation due to increased competition. As one interviewee said:

> "When I started off, most students come here and were aware of the status difference of [PABs]. But I would say that now, that's virtually gone. You've got that range of professional bodies who are all offering a similar product and they're not going to differentiate it by going back to what was there before".
> (P06, ACD)

The competition among PABs has caused greater homogeneity. PABs are interested in increasing membership through student enrolment, satisfying employability needs, and meeting regulatory requirements to ensure the strength of their institute. Most interviewees representing PABs reported acting on sustainability by partnering with organisations in the sustainability space, increasing awareness through thought leadership, and including sustainability in

educational offerings which corroborates earlier findings based on documentary analysis[15]. One interviewee elaborated on this:

> "We've developed a whole suite of workshops that can be delivered virtually […] We've developed all kinds of materials on [sustainability]. […] so, we're going to look at [sustainability] and then who are we going to partner with and how are we going to deliver it".
> (P03, PAB)

b) Accounting Firms and Practitioners

Accounting firms take up a dual position as multi-embedded constituents of professional bodies while also functioning as employers. Amongst accounting firms and practitioners, interviewees emphasised a group of accounting firms known as the 'Big four' deemed *elites "because they are global businesses"* - P11. The role of the big four accounting firms in UK PAE emanates from their ability to decide which professional body would train their recruits:

> "[Big four accounting firms] make choices about which professional bodies' training programme they're going to pursue or support their students to pursue."
> (P12, PAB)

There is an interdependency between professions and the influential stakeholders- professional firms as they try to influence one another:

> "[Professional firms] colonised the professional body to serve their needs […] but there's always a dialectic exchange between them and some tension between them, because you see the professional bodies trying to exercise their independence of these people and bringing regulatory regimes that will regulate these people, and then you see that the practice firms trying to also take control and determine what happens".
> (P01, HYB)

[15] See table 5.6 in Chapter 5 that shows the various initiatives of UK PABs in addressing sustainability.

Regarding the interest of accounting firms and practitioners, they seek skills and expertise to serve their clients and gain competitive advantage. In this manner, the market and client interest drives what the firms are doing, as explained in this comment:

> "The firms started to evolve over the past 20 years into more advisory and non-audit engagement types of services. And they've realised there's a much bigger market for them there".
> (P08, PAB)

Several interviewees (P12, P13, P20 and P21) mentioned that accounting firms have become interested in the climate change agenda and sustainability matters driven by market demands. The firms' interest will enhance the efforts for sustainability in PAE:

> "With the climate change agenda that the big firms are becoming more interested in being able to assure and help their clients with non-traditional or more integrated types of reporting. So, I would hope that the professional body syllabi would be reflecting that".
> (P13, ACD)

PABs and accounting firms are already developing training in certain aspects of sustainability as mentioned by an interviewee:

> "If look at [the big four] where I worked, we started developing climate specific training for the whole practice. We did that in conjunction with a [PAB]".
> (P21, REG)

c) Employers

Employers are the market users of professional accounting expertise. PAE is offered as a product for students intending to become professionals and provide services to different employers. So, it is the market as determined by employers that owns the qualification:

> "[PABs] don't own [the qualification], it's the market- employers and to a certain extent students".
> (P05, PAB)

Accordingly, many interviewees reiterated that the PAE design is focused on employers' wants

and needs more than anything else:

> "What most professional bodies try to do in the employability stuff is to gauge what is it that an employer wants, and therefore they prepare people to be able to satisfy the needs of an employer."
> (P01, HYB)

Since there are a variety of employers with constantly evolving needs, accountants are trained for a broad range of skills to function in each of these capacities. One individual noted: *'employers are not homogenous at all'*- P01. Regardless of industry or sector, employers want competent professional accountants who can function effectively within an organisation and create value for them. Another interviewee from a PAB further illustrated the role of employers in the statement:

> "Employers are obviously the end customer for our members so that our members join organisations to help them add value, create value and public good for the organisations that they work for. So, we have to make sure that what we offer are qualifications which are highly relevant for a broad range of employers in the public, the private sector and in the not-for-profit sector".
> (P10, PAB)

d) Accounting Students

Students are beneficiaries and recipients of PAE, they are of keen interest to PABs, and they can also be counted as customers particularly if they are funding their professional training. There are mixed opinions about the customer status of students, which has implications for PAE changes. On this issue, P01 reported:

> "One of the key drivers is a shift from a student orientation to a customer orientation, so the student is seen as a customer and not necessarily as a student, and that seems to many people a small step, but it has huge implications".
> (P01, HYB)

Students choosing to study accounting have varying interests and preconceptions about the profession. Some students decide to study accounting in the belief that it will give them the skills to gain financial success in the business world:

> "The reason that [students] would like to join accounting degree is because they would like to be employable, to be thriving in the business world, […] some students still have a very strong ideas about working in financial world and also produce some financial gains, and they think that the accounting profession can actually help them".
> (P07, ACD)

In contrast, some students may have an alternative motive for studying accounting. Another interviewee suggested that students are now more interested in careers that have a positive societal impact:

> "[Students] have this desire to have a career where they feel that they can do some societal or environmental good, that they're actually in a profession, that creates good for the world, as opposed to purely profit-driven".
> (P14, PAB)

Several interviewees (P07, P12, P14, P18, and P21) discuss the orientation of students about sustainability issues. While students have greater awareness of sustainability, the majority do not yet realise the practicalities of sustainability as depicted in the following statements:

> "Increasingly, there are still quite a lot of students that are still very financial oriented but increasingly they have become interested in [sustainability]".
> (P12, HYB)

> "The younger people coming in are much more concerned about the concept of sustainability, than the practicalities of it".
> (P18, HYB)

e) Accounting Academia

Academics within universities are responsible for educating a pool of students who proceed into professional training. Accounting academics have a '*proximate intellectual relationship with the profession*' (P01), and are multi-embedded entities in education, research, and policy. So, academics take on several roles within the structure of PAE:

> "A lot of those are academics and they are obviously one of the stakeholder groups who has an influence on the syllabus, and obviously a significant influence on the exams, so they write the exam questions."
> (P05, PAB)

Accounting academics during the interview reinforced their role in the PAE system (P09, P13, P18, and P19). One accounting academic recounted their experience of being involved in the several aspects of PAE functions:

> "I've done some work looking at the training process for [multiple PABs]. I've been involved in accreditation and seeking accreditation for programmes. I've been involved in teaching."
> (P13, ACD)

Academics are interested in making an impact in society through their research and teaching. Most academics believe that education goes beyond vocational training and requires enlightenment towards a greater purpose. As one interviewee commented:

> "From our research, our teaching and everything, we know the problem that are happening in the society […] we can actually work with our students to change that, […] not just only equip them with the skills that the industry really need, but we need to equip them with the skills to challenge the society as well, so they can actually lead the change".
> (P07, ACD)

As such, accounting academics tend to differ from professionals about the nature of education that an accountant requires, and these tensions have been reoccurring since the inception of the

profession. Academics being part of university education have a degree of freedom about the type of education they should offer which can be in tangent with professional training:

> "There is a little bit more freedom in the academic world because they can explore perhaps more innovative or if you like more specialist types of accounting areas which may not necessarily be core to the job of the accountant".
> (P10, PAB)

Several interviewees (P10, P12, P13, & P18) acknowledge that sustainability became an imperative because of the influence of academics. Accounting academics have talked about extending the frontiers of accounting to issues like sustainability, while others were apathetic to these issues:

> "Academic accountants had been talking about this wider perspective for many, many years. And there are countless academics that had been involved in these things. […] I don't think employers have picked up as quickly as the academics on the need to be measuring these wider metrics and taking sustainability much more seriously."
> (P10, PAB)

f) Universities

Universities are intricately linked to the role of academics in terms of teaching and research, and they have a distinct role as educational institutions, as evidenced in this comment:

> "The university has two roles so firstly, we need to try to get our graduate employed, but on the other hand, I think our role is to actually lead the society as well".
> (P07, ACD)

In the UK, accountants do not have to possess a degree in accounting. The difference in orientation could be the reason why universities degrees are considered steppingstones to the qualification:

> "They're not qualifying accountants for the profession. They are giving them education programmes to obviously expose them to accountancy and the skills that they need, but they're not effectively qualifying them. That has to be done by an official awarding body

like us".

(P10, PAB)

Many interviewees (P03, P05, P06, P07, P18, and P19) discussed universities' connection to PABs through accreditation procedures. Both parties sign accreditations agreements that effectively grant student exemptions into the accounting qualification affirmed by one individual:

> "The majority of universities want to get as many exemptions as they can because that's what attracts students to the university course."
>
> (P18, HYB)

In terms of sustainability, some interviewees (P05, P12, P18) affirmed that universities embraced sustainability in their education programme because they have realised its relevance for the future:

> "The demands wasn't so much from the accountancy firms […] it was more from the universities themselves that see that [sustainability] will become relevant in the future"
>
> (P12, HYB)

There are also various sustainability education agendas, such as the UN PRME, that enabled universities to act on sustainability education more quickly compared to other actors.

g) Professional Tuition providers

Professional tuition providers (PTPs) were identified as the other major educational institution in PAE as some PABs outsource the qualification's teaching component to them. PTPs specialise in providing teaching services to students undertaking professional exams and are usually rated based on student performance. The interviewee from this actor cluster described their function in this way:

> "The professional body sets the curriculum but the educational pathway, the instruction, the pedagogy, the thinking, teaching is delivered by us. There is a framework of where you need to be, but the actual delivery is hugely influenced by [PTPs]."
> (P11, PTP)

PTPs have a different function to universities because they are business organisations helping students prepare and pass the professional examination in exchange for a fee:

> "The role of the [PTP] is primarily to get you through your exams, that's what they are paid on".
>
> (P05, PAB)

There is a concern about PTP's tendency to emphasise student pass rate, which some believe can adversely affect the quality of professionals produced in PAE:

> "[PTPs] get remunerated based on the number of people who get through their course. But there's this tendency to want people to pass which is understandable, but you've then got to think about what's the next step in terms of quality to ensure that people aren't just being put through".
> (P21, REG)

Due to the strategic intent of PTPs, sustainability is prioritised to the extent that it becomes crucial to passing exams. If sustainability is contained and assessed in the PAE framework, then PTPs will certainly teach their students:

> "[The] curriculum determines to a certain extent the boundaries of what [students] need to know then we would translate that into content and then it's down to the individual presenter to a certain extent to present that as they think is appropriate."
> (P11, PTP)

h) The State and its Agencies

The State's legislative powers gave the accounting profession its status and remains an influential determinant of how accountants operate in each jurisdiction:

> "In many jurisdictions, the professional accounting bodies are creatures of law and so they are backed by statutes, and so what they can do and cannot do is essentially

circumscribed but also enabled by statute, so if a State decides to change what you can do that's basically that".

(P01, HYB)

Therefore, the State sets expectations for PABs and allows them to control and manage professional affairs, especially the qualification process:

"The State pretty much says to the professional accounting bodies, 'You know more about accounting than we do. So, you just sort it out".

(P13, ACD)

Interviewees reiterated that the oversight function of the State is channelled through its agencies which have established authority over education standards and accounting practice:

"Other stakeholders we have would be government and when regulated as ordered by the Financial Reporting Council. We also have an eye on other regulatory bodies. So, OFSTED[16] for the apprenticeship scheme which a lot of people train through."

(P15, PAB)

The FRC functions as the primary supervisory agency for the accounting profession and is also expected to monitor the education processes of accountants through the PABs as well as the training policies of audit firms. One individual elaborates on how the FRC plays a role in PAE:

"The regulator has a role of oversight over the institutes and working with the institutes to ensure the quality and with the work that the [regulator] does with the actual audit firms. I think the regulator looks at it from different perspectives, looks at the Institute, but they also look at the training that the companies that have the student, the associates who then become the CA".

(P20, REG)

The mainstreaming of sustainability through increased drive from government and regulators is shaping how the accounting profession deals with the it in its education:

[16] OFSTED is The Office for Standards in Education and regulates apprenticeship training in the UK.

> "There's a huge Government drive, at the moment, again, particularly on climate change, on the reporting of how climate is affecting an organisation, but also the effects of that organisation on the environment and society."
> (P14, PAB)

i) Professional Interest Institutions - IFAC

The role of IFAC is recognised by most interviewees across different actor clusters as the organisation offering a governance framework for the global profession. One interviewee stated:

> "There's IFAC that would sit at the top and effectively provide guidance for all the profession to a certain extent".
> (P11, PTP)

IFAC issues the IES that provides specific guidelines and expectations for PAE, which all member bodies must implement, including UK PABs. Compliance with IFAC's standards matters to professional bodies, and these standards are constantly updated to reflect changes in the profession:

> "So, IFAC have the international education standards that we have to comply with, and we ensure that when they update their education standards that we include these outcomes within our qualification".
> (P10, PAB)

Aside from issuing standards, many PABs also rely on IFAC for global thought leadership on issues pertinent to the profession, such as sustainability:

> "We do take a lot of our lead from IFAC. However, IFAC to be fair is publishing some good stuff in the [sustainability] space and we're a member of IFAC so we do get access to the publication."
> (P08, PAB)

Furthermore, governance institutions, including IFAC are working on developing standards and frameworks that will feed into the accounting qualification:

> "The IASB, IFAC and the European Union are all developing narrative reporting, non-financial reporting standards, and that absolutely then go straight into the qualification." (P03, PAB)

Another interviewee acknowledges that the influence of a professional interest institution such as IFAC can help to shape state policies and actions about sustainability at the international level:

> "I mean, these things exist at international level, through IFAC, the International Federation of Accountants, So, you could argue that the profession has these structures. And arguably, I hope they are using to try and influence Government policy". (P09, PAB)

6.4.2 Interactions through Power and Influence

From the interviews, notions of power and influence were recurrent themes in understanding how actors influence the integration of sustainability into PAE.

> "You need power and powerful people to push something like sustainability". (P19, HYB)

This section explores power and influence in two sub-themes: first with regards to specifying some actors with power or influence and then the channels through which they exercised power/influence in the structure of PAE to advance sustainability.

a) Powerful and Influential Actors

Power in the context of PAE consists of the capacity of certain actors to compel or persuade PABs to make based on its explication in the institutional literature (Lawrence, 2008). Some interviewees (P01 and P08) identified the practices of the profession in prioritising legitimate pressures from certain powerful actors:

> "There are pressures coming from everywhere, and we say that some pressures are not legitimate and so we silence that pressures and ignore that, and some pressures are

> legitimate, and part of the legitimacy also has to do with who has power to compel us to do things."
>
> (P01, HYB)

Likewise, P08 from a PAB mentioned applying '*Mendelow's mapping'* to manage stakeholders' interests in the PAE such that the power and interests of actors determine their impact on the education reform process. Most interviewees from PABs easily identified employers and regulators as those with power to drive changes in PAE:

> "There are various and diverse demands on [PABs] to provide education programmes and curricula which are most relevant for the employment market but also suitable to meet the requirements of the regulators."
>
> (P10, PAB)

Amongst employers, the big four accounting firms have a larger power base because they sponsor more students to take the qualification programme of PABs. As one interviewee stated:

> "I think the stakeholders with the loudest voices are the employing firms, particularly the large ones who put large numbers of students through different professional bodies' training programmes."
>
> (P13, ACD)

Additionally, the big four accounting firms also have a direct influence as members of committees within PABs:

> "[Accounting firms] often have representatives particularly at the big firm level who sit on the professional bodies, for example, education committee or members committee or research committee. So, they're directly involved in helping to shape the policies of the professional bodies."
>
> (P12, HYB)

Power is not always absolute, and other actors can influence the PAE process. One of these is accounting academics that produce thought leadership, sharing their expertise and impacting decisions at the committee level of the professions, as some interviewees mentioned:

> "[Accounting academics] have some influence by people doing thought leadership, some of the research, some of the accounting education work that's done".
> (P18, HYB)

> "The biggest influence is by professional accounting bodies having academics on their committees. So, maybe their professional education committees or sustainability committee"
> (P13, ACD)

Those who conduct the curriculum development and professional training examinations are sourced from educational institutions, which include academics. The direct involvement of academics in the design and assessment of PAE programmes offers an avenue for considerable influence:

> "You've got people who influence the design of the curriculum. […] I suspect that they will co-opt people from university sometimes when they're reviewing the syllabus."
> (P09, HYB)

Another influence emanates from the PTPs as educational partners in the development of knowledge and competencies of aspiring accountants. P11 shared how PTPs influence students:

> "Well, we see them more, you might be an ICAEW or an ACCA student, but you spend more time with us than you do with your professional body. And so, therefore, our ability to influence is high".
> (P11, PTP)

Specifically on sustainability, other actors who desire change can also appeal to powerful institutions such as regulators, which then causes the profession to re-examine its processes:

> "If [an NGO] manages to align itself to a powerful institutional or social player, it can come into our constellation of things, all of a sudden it changes the translation of who is powerful for [the profession]"
> (P01, HYB)

b) Channels of Power and Influence

Interactions among actors in the PAE structure are channelled through frameworks such as training contracts, accreditation, education standards, and rating schemes, allowing a pattern of influence to emerge. First, training contracts involve an agreement amongst four actors - PABs, firms/companies, training providers and students whereby each has a say in the outcome:

> "In order to be entering to membership in ours, you have to pass our exams but during the time that you're taking exams, you need to be in employment. So there's a tripartite arrangement between ourselves, the training provider, the company that you work for you have contract with, and the student who needs to be in fulltime employment."
> (P03, PAB)

Effectively, these training contracts also allow PABs to shape the activities of firms. Most PABs agree that they have equivalent influence in practice firms especially through the process of education, as one interviewee explained:

> "Are we influenced by the firms? Yes, we are. Are we having an influence back? Yes, we are. That's kind of like the ebb and flow of the tide."
> (P08, PAB)

Second, accreditation schemes involving PABs and universities foster alignment between academic degrees and professional qualifications. Some interviewees from professional bodies allude to universities having to 'play by the rules' of PABs to obtain accreditations. So, PABs exert major influence at the university level through this mechanism.

> "The majority of universities want to get as many exemptions as they can because that's what attracts students to the university course. So, whatever the accounting body does will drive change at university level."
> (P18, HYB)

Conversely, academics tend to differ about the role of accreditations as some see it as a constraint to the ideal education for students, which often creates tensions with PABs. On the issue of accreditations, one individual commented:

> "Academics like to moan because they say we impose our syllabuses on them and we constrain their abilities to educate on other stuff, we don't impose anything, if they want to get credit, then our regulator says you have to benchmark, but you don't have to get credit, nobody's forcing you to get credit."
> (P05, PAB)

The partnership between universities and PABs is mutually beneficial; universities seek PAB accreditations as a mark of status and programme marketing, while PABs would like to increase potential student intakes. Some universities go to the extent of fitting their academic programmes into the professional training template, which raises contentions:

> "The universities and the professional bodies work so closely together, that's a positive side of all of the exemptions. And [a UK university] created a degree that mirrored quite a lot of the [UK PAB] papers. So, they were getting more exemptions potentially than anyone else because they were doing it the opposite way around."
> (P19, HYB)

The interviewees seldomly mentioned rating systems as a device of influence, even though it is an element that defines the relationship between PABs and PTPs. Rating systems curate the relationship between PABs, PTPs, and students whereby PTPs are rated based on performance metrics that will affect student enrolment. One individual elaborated on this:

> "We have a rating system to rate our tuition providers by looking at the quality of their staff, quality of their teaching and even how well students that they're teaching perform in our exams. And by getting a higher rating from [a PAB], they become more attractive to students".
> (P10, PAB)

Lastly, education standards and benchmarking mediate the relationship between governance

institutions and PABs. PABs influence some of these regulatory requirements but also require their utmost compliance.

> "We have to meet [the standards] because we are a member, a full member and all professional accounting bodies of note are."
> (P05, PAB)

To recap, the themes in this section have buttressed and expanded the previous discussions on the UK PAE system map concerning the role and interactions of actors. It reanimates the PAE system map from an abstract elaboration into an active portrayal of actors in the PAE structure with the inclusion of power and influence shaping the awareness, choices, and behaviours of actors in the accounting profession.

6.5 Conditions for Integrating Sustainability in PAE

The interviews sought insights into the process of integrating sustainability into PAE, to which some interviewees responded that the primary condition for change is consensus/convergence among actors in the profession. The profession realises that resistance can emanate in the process of integrating sustainability into PAE, so change must be curated under certain conditions to avoid fragmentation or collapse:

> "I think the conditions for changing are equally as important as the changes themselves. Now, I know the changes that we require are urgent. [….] unless you can bring people along on the journey, you're going to meet resistance. And what happens is you end up with splintering and fracturing".
> (P08, PAB)

Similarly, another interviewee suggested that *'the profession must initiate change through a gradual process to minimise imminent resistance from surrounding elements'* (P07). There was a sense amongst most interviewees that the barriers to sustainability integration can be resolved

through active strategies by the profession. The next themes explore two factors underlying the change process; barriers that pose resistance and strategies employed to facilitate the change.

6.5.1 Barriers to Integration

Interviewees reported how elements of the accounting profession and perceptions of actors impede change. Four sub-themes were deduced from the interview analysis regarding the causes of resistance such as the relevance of sustainability to accounting, the perceived complexity of sustainability, conflict in professional identity and role, and low prioritisation of sustainability within the profession, which are explained below.

a) The Relevance of Sustainability to Accounting

Professionals inhibit sustainability integration in PAE by questioning its relevance to their role:

> "When we try to integrate sustainability into accounting people would ask, is that relevant to accounting, how is that relevant to accounting".
> (P07, ACD)

Relevance is based on the extent to which sustainability affects the jobs and roles of professional accountants. Comparable with previous findings on the role of accountants in sustainability practices[17]; as in this case, accountants did not readily acknowledge the relevance of sustainability to their roles, believing it to be external and peripheral to scope of their work:

> "Accountants were largely the same as any of the businesspeople in that they certainly didn't see themselves as having a role. And in fact, you could say that in many instances where people were trying to do the right thing, they were in some way a block".
> (P16, PII)

Sustainability becomes even more problematic for accountants in smaller firms who prefer focusing on the familiar technical arrangements of their practices than becoming entwined into

[17] Further discussions can be found in section 2.2.2 of chapter two and in the work Schaltegger and Zvezdov, 2015; Egan and Tweedie; 2018.

the greater dilemmas of sustainability. Such disinterest persists because sustainability has not yet permeated accounting at the technical level, which some practitioners uphold as the core of accounting:

> "I was talking about environmental issues, sustainability and all that stuff and there was reasonable feedback, but a lot of the feedback was, quite interesting, but 'it's not really useful to us in our jobs', which you can understand. You know, these people are doing technical work, and hardly ever did these issues come up in their job".
> (P09, HYB)

Such views should be approached with care as other reports show that some smaller firms were providing ad hoc sustainability advice to their clients (see Spence, Agyemang and Rinaldi, 2012).

b) The Perceived Complexity of Sustainability

Some interviewees (P01, P08, P11, and P17) argued that sustainability encompasses many interconnected problems, lacks precision, and entails duplicated frameworks and standards. Sustainability seemed 'abstract' and attempts to interpret sustainability did not capture the complexity of the problem in a relatable way to accountants. As one interviewee said:

> "I think because it's a very complex problem. I don't think finance and accounting in particular has ever really considered the true complex nature of the entire environment, the whole notion of sustainability. For some people, it can be very abstract."
> (P08, PAB)

Similarly, sustainability does not conform to the usual precise and fixed approaches that accountants are accustomed to:

> "Sustainability issue sometimes do not lend themselves to precision, and we accountants are creatures of precision [….] Those who choose to be accountants often are the least discursive of people, and so at the moment, a lot of the issues that stand out in the sustainability area are of the kind that is discursive and unstructured".
> (P01, HYB)

The widespread view is that accountants feel disconnected from the emergent, complex, abstract, and interdisciplinary nature of sustainability. Standardised approaches to sustainability have emerged, but these frameworks and terminologies are replicated, often creating confusion for educating professionals. On this note, one interviewee remarked:

> "It's a really confusing landscape, and I don't think people understand what sustainability is. There's a kind of like alphabet soup of different standards and frameworks out there which are all using slightly different terminology and language to describe much the same thing, so for many accounting professionals, they don't know where to go".
> (P17, PAB)

c) Conflict in Professional Identity and Role

The professional identity of accountants also comes into question when considering sustainability issues because accountants are perceived to be conservative, rigid, and only competent in financial matters. The training of accountants focusing on technical rules of accounting can reinforce a rigid mindset:

> "Some accountants we trained, they love nothing more than the details of financial reporting, the rules-based engines of taxation and auditing, its rules, its procedures, you follow it, it throws out exception, you investigate them. I find that type of mindset struggles with the much grander notions of being strategic, being able to hold these much bigger notions. And for me, that's a problem".
> (P08, PAB)

Some interviewees (P06 and P09) echoed the view that defining the accountant's identity as conservative implies avoiding issues that are outside the scope of their role:

> "Many people in the profession are very conservative — with a small c — and don't think it's their place to get involved into those wider policy issues."
> (P09, HYB)

Furthermore, accountants differentiating between personal identity and professional identity has implications for how they handle sustainability. Accountants need different 'hats' for each identity or role they undertake:

> "And, you know, people's saying, "As a mother, I understand what you're saying but as a businessperson, I don't".
> (P03, PAB)

d) Low Prioritisation of Sustainability

Sustainability falls behind in the profession's priority because some members of the profession do not yet see how sustainability will affect their jobs, and governance mechanisms are yet to enforce sustainability practices across all areas. As one interviewee put it:

> "The whole sustainability agenda, whilst it's incredibly important from a societal point of view, has kind of probably, you know, would be a bit down the pecking order".
>
> (P18, HYB)

The statement above implies some institutional apathy which diminishes the process of integrating sustainability in PAE. As governance or market systems give accountants greater responsibility for sustainability, the profession will have a greater justification for educating accountants on the subject matter:

> "For something that isn't quite statutory, yet it becomes a bit more difficult to build that kind of compelling argument and justification for including it.
> (P14, PAB)
>
> "The reason we haven't done well at all is partly because the demand for it has not been as crystal clear as other demand for other forms of knowledge".
> (P01, HYB)

6.5.2 Strategies for Integration

The strategies for integrating sustainability appear as factors meant to counter resistance within the profession and enable PAE reform towards addressing sustainability. The fundamental task for the profession is rectifying the narrative about what accountants do and who they are:

> "The first thing accountants need to do in terms of either using this structure or a new structure to do that is to be able to have a narrative for themselves what are we accounting for, to whom, and what."
> (P01, HYB)

One interviewee reiterated that the needed transformation goes beyond changing accounting education and reorienting the core focus of business:

> "You need to change not just the accountancy profession education, but you need to change the whole business economics. The whole business economics is still so much focused on financial money and short-term profits […] and so a lot needs to be changed."
> (P12, HYB)

This section highlights five core themes depicting the efforts to enable the integration of sustainability into PAE.

a) Capitalising on the Public Interest

The profession has re-discovered the strength of its public interest obligations to characterise its involvement with the sustainability agenda as it was one of the rationales identified for integrating sustainability into PAE[18]. Accounting academics (P09, P13 and P18) seemed more conversant with this justification in advocating for the accounting role within sustainability. As one of them articulated:

[18] See section 6.1.2 of this chapter for further explanation.

> "I would argue under the public interest obligations that [the profession] has a very strong compulsion."
> (P13, ACD)

Similarly, P03 defines the public interest as the pathway for the profession's relevance to the sustainability agenda since it affects the public:

> "[We] see that as our overriding goal is to serve the public interest, and what I would characterise that is to say it's about the issues that matter to people – climate change, inequalities – where the profession has a relevant role and can do something about it".
> (P03, PAB)

The accounting profession knows how much the public interest means for the profession's status and role in society. But a few interviewees expressed the challenge of defining public interest which has been debated in the professionalisation literature as well[19]. The public interest, just like sustainability, can be interpreted differently:

> "Professions should serve the public interest. But how do you interpret public interest, people might interpret the public interest differently".
> (P09, HYB)

b) Reorienting Mindsets and Values

Interviewees identified the mindset about accounting and accountants as an impediment to sustainability integration in PAE. The difference in mindset is an outcome of a fragmented education process whereby professional training is prioritised above degree programmes:

> "There are some contestable values within accounting. But often, they are not recognised as such by people who study accounting, particularly if they've not gone to university and thought about these things in the university environment, but they just do accounting training".
> (P09, HYB)

[19] The debates about the public interest are discussed in section 2.1.2 in Chapter 2

Many interviewees (P01, P07, P08, P09, P16, & P17) discussed changing the mindset of accountants as a step to enable accountants to learn about sustainability. The mindset change is needed at the initial stage when students learn about accounting:

> "If you pick the average accountant students, they tell you Cash is King that is ingrained in the mind of accounting students, we need to find a way of replacing that".
> (P01, HYB)

The profession must initiate a mindset shift from how people are socialised about accounting, which affects accountants from the start to the end of their professional life. In one instance, the mindset shift is described as moving from 'money/cash' to a 'value' orientation:

> "There still is a whole mindset out there that [sustainability] is just the nice thing on the side. It's not about the real money. And I think that light bulb moment when people actually get this is absolutely about creating value for the business, then that's when things start to change."
> (P16, PII)

It was also suggested that the mindset change involves moving from a precise/accurate mindset to an open mindset that considers future scenarios to plan the best course of action for an organisation:

> "I think it needs a different mindset, so that means that accountants have to move away from being able to give a precise answer but actually come up with different scenarios of what might happen in the future and then make a decision as to which is the more likely and which is the best route to take".
> (P17, PAB)

c) Role and Identity Differentiation

Identity was previously stated as a barrier to change. Equally, some interviewees were keen on clarifying the accountant's role in sustainability concerns, reiterating that accountants have the necessary expertise to contribute to sustainability:

> "[Accountants] are the people that can turn [sustainability] into a reality, I suppose, in the right direction or the wrong direction".
> (P11, PTP)

Furthermore, professionals want to preserve their place and status as the nature and expectations of their work evolve. There were similar opinions that accountants have a distinguished position and place in the sustainability space different from other professionals:

> "We aren't training people to be sustainability experts. We're training people to be accountants who know about sustainability […] it's not about so much turning our members into environmental evangelists, it's about our members understanding that they are dependent upon nature and therefore has to understand the critical importance, the strategic importance of that to the business world".
> (P03, PAB)

A few interviewees (P12 and P17) proposed that the best way to enable accountants' roles in sustainability is to have a distinct specialisation within the field. In this way, accountants may choose to become sustainability experts through a specialised education route as one individual suggested:

> "There needs to be attention for specialisation, and so you need to have some basic information of financial issues and sustainability issues, and then you can further specialise to become a financial auditor to become an IT auditor, become [a] sustainability auditor".
> (P12, HYB)

Another interviewee supports the specialisation of accountants on different dimensions of sustainability issues:

> "It's such a big space because you got the environmental side, you've got the social side and you've also got the governance side. And it's knowing that many accountants won't be dealing with all the three aspects, they might be specialising on environmental, or they might be specialising in supply chain, and anti-slavery".
> (P17, PAB)

d) Expanding to New Frontiers - Nature and Society

Another strategy involves focusing on accounting beyond businesses and toward nature, and society can be seen as an expansion opportunity for accountants. A question that sustainability poses to accountants is how to value the intangibles (for instance biodiversity) holistically and beyond the previous business models and financials:

> "Traditionally [an accountant] has been internally focused on what the business is doing, now they're thinking holistically about what's the impact of that business on the society and the environment. And it's also how they're going to value the intangible aspects of biodiversity, key species, how do they impact on your business model, so it becomes wider than the pure financial focus".
> (P17, PAB)

A new mindset will emerge from this change of focus when accountants can see beyond money, balance sheets, and profits, take responsibility for social and environmental impacts, and recognise the several interest groups to whom they must be accountable:

> "For that structure to change, we must move on to say that we believe that society exist and there are different sections of society representing different interest, and they use the resources that society has, the common resources that endowed to a particular society for their different ends."
> (P01, HYB)

Decentralising from business to nature and society is core to structural changes in accounting and finance, including PAE:

> "I think that the current shift is a qualitative shift to one that says, actually, nature is strategically important to what we're doing. […] The problem we need to solve is the fact that we're killing the planet and we've got to rearrange ourselves around that."
> (P03, PAB)

e) Affirming Emergent Sustainability Concepts

It was apparent from the interview analysis that the accounting profession has devised new conceptual terms for explaining sustainability[20]. As one interviewee said:

> "I think most people address issues of sustainability conceptually and I agree that at the beginning that is not seriously, […] in the area of strategy for example, most people are now started talking about creating shared value rather than creating and maximising shareholder value".
>
> (P01, HYB)

The retooling of concepts is most evident in the capital construct that has been extended to encompass non-financial elements. Some actors in the accounting profession actively work to produce the terminologies and conceptual frameworks used by accountants in education and practice:

> "We look at common words that are used by accountants, and what do they actually mean? And how narrow a perception they been trained to have around that word? So, if you look at the word capital, what does the word capital mean to you? And they talk about financial capital and share capital and capital expenditure".
>
> (P16, PII)

Interviewees broadly acknowledge that the new understanding based on sustainability will substitute the traditional concepts studied by accountants.

> "[Sustainability] will change the structure of the model that we've studied for the last centuries over the years."
>
> (P05, PAB)

6.6 Approach to Integrating Sustainability in PAE

Evaluating the approaches to integrating sustainability into PAE reopens a frequent question about the purpose of PAE. Some interviewees (P04 and P10) explicitly assert that the purpose

[20] See section 6.2.2 for the emergent terminologies that interviewees used to interpret sustainability.

of accounting education is to train accountants for the workplace. As one interviewee commented:

> "The objective of [PAE] is to give somebody an education and the necessary skills and capabilities to go out into the workplace and work as an effective accountant."
> (P10, PAB)

An alternative view of the purpose of PAE expressed by others (P08, P07, and P18) was that education can be a tool for making a difference beyond business and the workplace. So, accountants should be trained to make an impact in society, as demonstrated by the comment below:

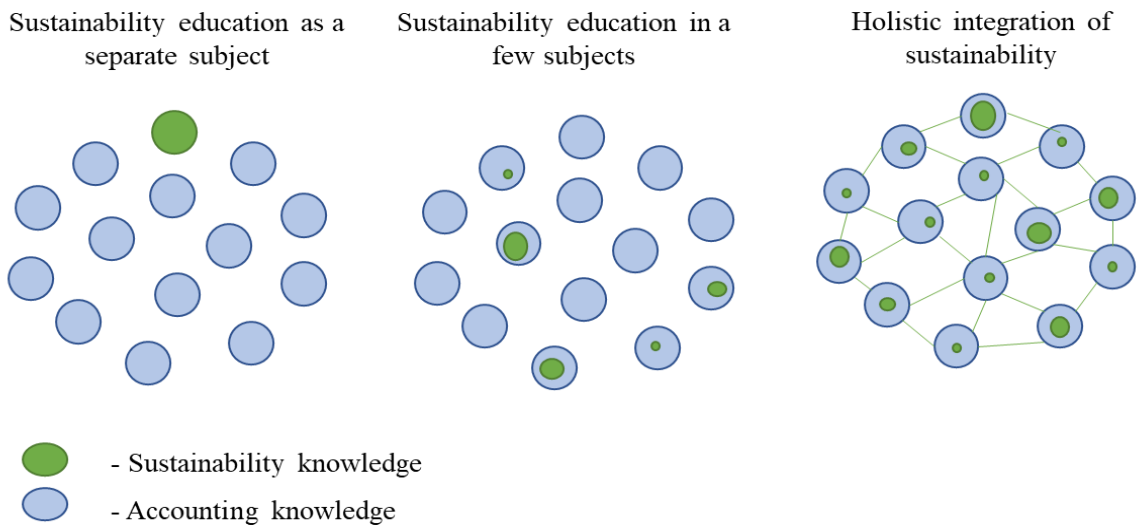
> "Keeping the qualifications relevant so that we are producing professional accountants with the right skills and competencies that will enable them to go out into society and act in the public interest."
> (P18, HYB)

The diverging views about the purpose of PAE will affect the extent and methods for educating accountants about sustainability. Following these considerations, the three themes below focus on the approach to embedding sustainability based on the current PAE framework as outlined by the interviewees.

6.6.1 Knowledge Areas and Content

Three viewpoints emerge from analysing how to build sustainability knowledge into the content of accounting training and are shown in Figure 6.14 below, including sustainability as a separate core subject (view a), sustainability in a few existing courses (view b), and sustainability in all current courses referenced across the training (view c).

Figure 6.15: Sustainability integration into knowledge and content



Source: author's illustration based on interview analysis

View (a) suggesting that having a separate module/subject for sustainability is the appropriate approach is epitomised in the statement below:

> "[PABs] dump sustainability into strategic management and strategic leadership, a little bit in governance. […] It's going to need its own paper if it's going to be taken very seriously."
> (P19, HYB)

As reflected in part of the quotation above, the approach of most PABs reflects view (b), where there are certain subjects where sustainability is evident, often culminating in the final case study examination. This is further evidenced in the comment below:

> "In performance management, we're looking at sustainability there. We're still looking at sustainability measures in financial reporting. But as I say, I think it's moved from financial reporting to other subjects."
> (P10, PAB)

Some other interviewees (P03, P13, and P17) felt that sustainability should be in every accounting subject area (view c). An interviewee from a PAB acknowledged that sustainability is covered in its learning outcomes using a holistic approach:

> "Our approach is not to have a separate sustainability paper; we believe that sustainability

needs to be bled through all of the different topics that are covered in the qualification. So, we're pretty comfortable that sustainability is bled through most of the learning outcomes and that gets reviewed quite regularly".

(P03, PAB)

P13 from academia further supports view (c) as the easiest and most effective approach:

"The easiest way is to have it as a core part of the syllabus, and to make sure that it is infused throughout all of the considerations that are examined and taught."

(P13, ACD)

Whereas another interviewee opts for a middle ground between view (a) and (c):

"You've got to have sustainability probably as an area, as a subject area that colonises a particular subject area that kind of opens up the broad issues, but once that that's been open, you got to be able to put them in every subject".

(P01, HYB)

Following the views above, PABs and other education institutions must work out the current contentions about each approach in embedding sustainability into accounting education content:

"There's an argument for having a separate [sustainability] module with some really passionate academics leading it. And there's also an argument for having an element in every module. For a hybrid where you have a big sustainability module that really does it to death and then there is a tangential reference in every module".

(P04, ACD)

6.6.2 Ethics and Moral Philosophy

"Most people put [Sustainability] under ethics, I mean moral philosophy".

(P01, HYB)

Embedding sustainability at the knowledge level is only the first step as educating accountants about the magnitude of sustainability issues requires examining the philosophical position underlying accounting knowledge in relation to society and the environment. One individual illustrates this and stated:

> "[Sustainability] was the sort of topic we would do in our philosophy sort of courses, but it was never in our accounting courses."
>
> (P21, REG)

A moral philosophy helps formulate the ethical principles that guide sustainable behaviour, decision-making, and execution among accountants. Since ethics is already a core part of accounting training, the prevalent view amongst interviewees is that sustainability is relevant to the ethical and moral behaviour of accountants. Another interviewee alluded to the notion of ethics as a pathway for sustainability integration:

> "There's an ethics pathway. […] and some [sustainability issues] would fit under ethics. But once again the ethics is specialised or focused within the areas".
>
> (P11, PTP)

Commenting on sustainability as a part of ethics, another interviewee asserts that it is about building up a moral ethos for accountants to act in conjunction with their technical knowledge:

> "[Sustainability] links with ethics as well because an ethical accountant would want to consider sustainability issues in the way they advise management on, which options to take, which strategic options, which financial or an investment appraisal."
>
> (P10, PAB)

6.6.3 Skillsets and Competencies

Most interviewees agreed that possessing skills and attitudes consistent with sustainability was more important than any fixed knowledge on the subject. P17 commented that:

> "The application and the skills behind [sustainability] are more important than understanding about the individual standard or framework, so that's where the competencies come in."
>
> (P17, PAB)

Three complementary skills and competencies surfaced from the interviews: interdisciplinary and collaboration, holistic and integrated thinking, and problem-solving and critical thinking.

a) Interdisciplinarity and Collaboration Skills

Several interviewees (P07, P13, P20 and P21) argued that the interdisciplinary nature of sustainability issues requires collaborative strategies so that accountants communicate with diverse experts on topical issues. P13 suggested that:

> "Accountants of the future will be members of wider sets of interdisciplinary teams who have got different sets of skills that are necessary for understanding and managing and addressing sustainability concerns.
> (P13, ACD)

Both, P20 and P21 echoed the view that there will be distributed contributions among various disciplines applying their skills and knowledge to solve sustainability problems. One of them commented:

> "[Sustainability] involves a lot of people working together from different fields, […] So I think collaboration will be key in terms of building that knowledge as well and bringing that knowledge into the profession."
> (P20, REG)

As such, accountants work with and collate information from a range of experts to make decisions on sustainability and business within the organisation. An interviewee from a PAB holds this view:

> "Having interdisciplinary conversations with climate change experts, biodiversity experts, those who have experts in forced labour and slavery, and understanding supply chains, and bringing that back into your business so you can have informed debate about where organisations move forward. [Accountants] need to step more into the centre and bring all this information across the business and outside their organisations".
> (P17, PAB)

b) Holistic and Integrated Thinking Skills

There were suggestions from the interviews that accountants need to have a 'forward, eco-system and holistic thinking' as part of their sustainability competencies. As some interviewees

noted, this type of thinking applies to many things (P08, P10 and P17). P08 expresses the importance of wider thinking beyond financial reporting and a focus on ecosystems:

> "The impact of thinking much wider than the balance sheet so this all notion of your stakeholders now is this ecosystem thinking."
> (P08, PAB)

Another interviewee, P10, emphasised integrated thinking in terms of time and future consideration being included in the mindset of accountants and its application to their roles.

> "I think the more we can do that successfully and create this ethos, inculcate into our trainees this way of thinking in a more integrated way and in a more long-term sustainable way, the better they will be within their roles".
> (P10, PAB)

Likewise, P17 uses 'holistic thinking' to describe the ability of accountants to consider the impact of organisations on society and business, which replaces the old 'silos thinking'.

> "Going forward it looks like accountants are going to have to start thinking less in silos and more about holistic thinking, about how an organisation impact society [and] impacts the environmental factors, so interesting times ahead as our ESG literacy improves".
> (P17, PAB)

c) Problem-solving and Critical Thinking

Since sustainability involves complex and interconnected challenges, critical thinking and problem-solving competencies are relevant. One interviewee proposed that accountants will sharpen their problem-solving skills to handle complex sustainability challenges:

> "They'll be more equipped with the skills of problem solving, because when you think about sustainability, there's no one answer, and with that as well, definitely need problem-solving skills especially the wicked and more complicated problems".
> (P07, PAB)

Along those lines, another individual mentioned that learning about sustainability will require accountants to develop the critical thinking needed to perform their emergent roles in numerous

organisations and institutions:

> "I think that by taking these ideas now, it's like we're adding another lens to their critical thinking and problem-solving skills. If we can give them a new lens well then, I think that's how we do our job".
> (P08, PAB)

The purpose of this section is to understand what reforms are necessary in PAE to integrate sustainability. Based on the themes discussed, it involves re-evaluating the three core areas of professional training: knowledge, ethics, and skills.

6.7 Summary

This chapter lays out the findings from interviewing individuals from diverse parts of the UK PAE landscape on integrating sustainability into PAE. Although sustainability is perceived as a broader societal issue, it has become a crucial concern for the accounting profession leading to reforms in the education structure of accountants. Besides the issue of sustainability, external pressures about the worth of professions and the internationalisation drive on accounting labour and expertise urges changes in PAE. The findings suggest that the profession seeks to maintain relevance, and its motivation to incorporate sustainability into PAE was prompted by socio-political mainstreaming, business imperative to address sustainability, and obligations to act in the public interest. The accounting profession prioritises sustainability in PAE amongst other pressures because sustainability alters accountants' knowledge and skill expectations.

The range of sustainability views indicates that the concept has evolved in the accounting profession with fragmented interpretations based on different ideologies that will affect its integration into PAE. There are some overlaps in the interpretations of sustainability offered by interviewees positioned on a continuum from expansive to applied views. The several strands of sustainability views across these two spectrums recognise the interwoven nature of safeguarding the planet and nature, ensuring intergenerational justice and equity, balancing the

interest of the planet, people, and prosperity, creating value for business and stakeholders, and managing sustainability risks affecting businesses.

Subsequently, the structural issues in PAE change threads a non-linear and multi-directional pattern of change since each domain (regulation, practice, and research) functions to shape PAE to varying extents. Interviewees offered insights that change can occur quickly and slowly and with high and low intensity based on the interaction and feedback among the domains in accounting. Mutual dependencies fuel shifts in the domains of accounting involving a network of actors with different interests and goals, such that each actor can also play a role in channelling change in the system of PAE. Amongst the actors in PAE, those who determine the employability of accountants (employers including accounting firms) and those who govern the jurisdiction and expectations of the profession (regulators) have greater capacity and power to make changes in PAE. Other institutions, such as accounting academics and education providers, use their influence to create change. Power and influence are exercised as several actors interact through devices such as training contracts, accreditations, education standards, and rating schemes. Changes in UK PAE are produced through the complex interactions among these actors with power and influence.

Accordingly, reforming PAE to incorporate sustainability requires consensus amongst stakeholders as resistance emanates from issues such as the relevance of sustainability to accounting, the complexity of sustainability, the conflict between professional and personal identity, and institutional apathy on the part of PABs. These impediments are addressed through various strategies as the profession resolves to take sustainability seriously in PAE. The findings clarify these strategies to include reiterating the links between the public interest and sustainability, altering the rigid mindset/values of accountants, differentiating accountants' role and identity from other professionals in the sustainability space, expanding the accounting

function into the areas of society and nature, and embracing new language/concepts to facilitate change. This chapter also highlights the approach for embedding sustainability in PAE. First, sustainability can be included in the curriculum as a standalone course, a part of existing courses, or included in every course. Second, sustainability can be embedded in the moral and philosophical foundation from which accountants develop models of behaviour. Third, PAE must reflect competencies that accountants need to make decisions that lead to sustainable outcomes for business and society.

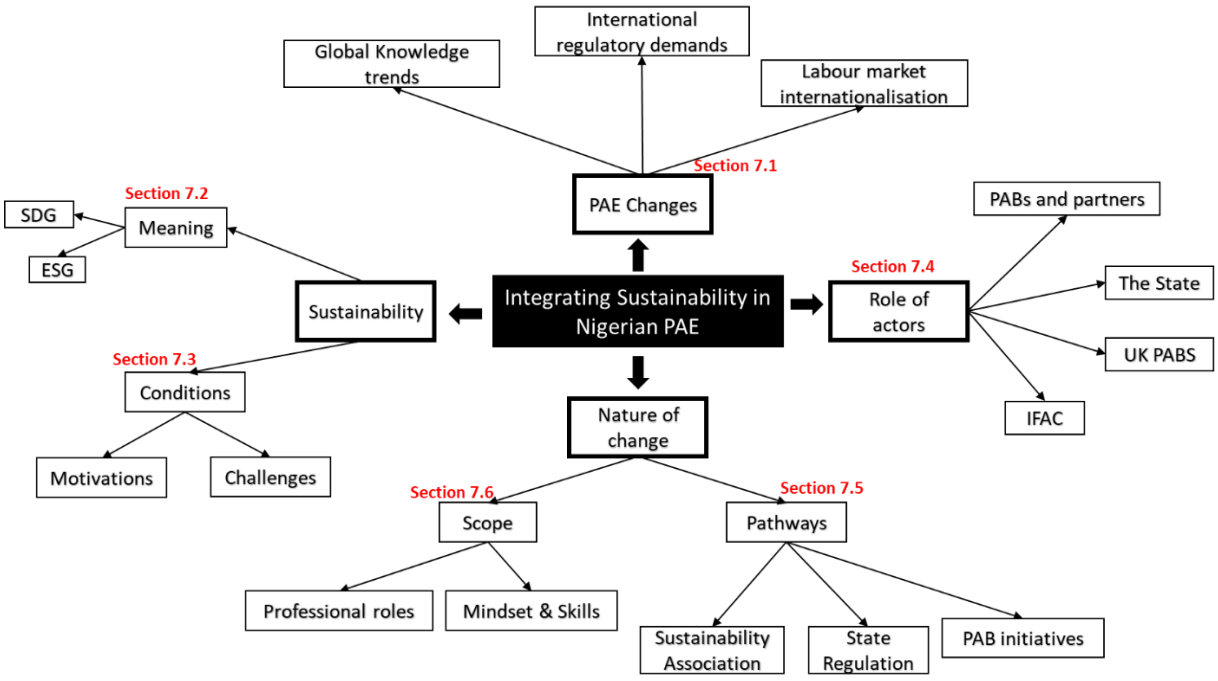
As the world needs accountants to become agents of sustainability transition, this chapter reiterates that the UK profession is increasingly proactive about embedding sustainability into PAE. The findings in the chapter are empirically significant and have broader implications for the accounting profession; even so, some of the themes discussed would be peculiar to the UK case. As the issues at stake may materialise differently elsewhere, the next chapter on the Nigerian case seeks to extend our understanding of the integration of sustainability into PAE as it applies to a different but interconnected context.

CHAPTER 7: NIGERIAN EMPIRICAL FINDINGS ON INTEGRATING SUSTAINABILITY INTO PAE

7.0 Introduction

This chapter focuses on interviews with relevant actors in the Nigerian accounting profession to understand the factors and dynamic pathways for integrating sustainability into PAE. There are intersections in the themes discussed in this chapter and the previous chapter (on the UK case) because the research questions and interview format were designed to preserve coherence between the cases. Notwithstanding, the findings reveal the nuanced mindsets and distinctive approaches to sustainability in the Nigerian profession. The significance of the Nigerian case is to demonstrate the analytical and theoretical significance of contextual differences and diffusion of sustainability from a global agenda to localised implementations and implications for the accounting education. Figure 7.16 below shows the main themes from the Nigerian interviews and how they are organised in this chapter.

Figure 7.16: Themes emerging from Nigerian interview analysis



Source: author's mapping based on empirical evidence.

The opening of this chapter, section 7.1, outlines the various drivers of PAE changes to trace the structure and progress of accounting training in Nigeria. In that respect, the findings demonstrate how the Nigerian accounting profession aligns with crucial developments and regulatory pressures by following an internationally harmonised approach in its professional education and practice. While the consequences of unsustainability are part of the lived realities in this context, section 7.2 shows how sustainability is used evocatively by allowing multiple perspectives and translations of Nigeria's social and environmental issues. Moreover, the interpretations of sustainability are shaped by mounting internal and external pressures categorised in section 7.3 as the influential factors that can empower or hinder progress in embedding sustainability into PAE.

Next, section 7.4 reveals the role and interactions of indigenous and foreign actors in facilitating PAE changes and allowing sustainability to permeate the Nigerian accounting profession. Furthermore, the themes in section 7.5 offer insights into the change pathways and recognise the instrumental actors contributing to sustainability-PAE integration. Although sustainability is still emergent in Nigerian PAE, the learning opportunities will develop as demand increases and global standardisation takes shape. Amending PAE to integrate sustainability is an ongoing process with significant outcomes; section 7.6 details some implications for the accounting profession as accountants face reinvention of their skills and mindsets as well as their roles within organisations. Lastly, section 7.7 summarises the chapter.

7.1 Drivers of PAE Changes

The interviews enquired into the structure and nature of changes in PAE, which led to disclosures on the current developments in the Nigerian accounting profession more broadly. Internationalisation was commonly viewed as driving PAE changes because it has significantly shaped the development of the local accounting profession. As evidence, P25 acknowledges

that pressure for changing PAE in Nigeria originates from the accounting profession's global landscape:

> "Because we are a part of a global world, we have seen pressure from stakeholders in terms of what should be taught, and what should be examined at the professional level. So, principally, I can say that the pressure has been more of external than internal."
> (P25, HYB)

Analysing the sources of changes in PAE reveals three major themes tied to internationalisation: global knowledge trends, international regulatory demands, and labour market internationalisation.

7.1.1 Global Knowledge Trends

Global trends occur outside the control of a sole institution, often emerging at the societal level. While the profession considers several of these emerging trends concurrently, its priorities will often be determined by the threat level, or the leverage provided to its aspiration for relevance. PAE must keep up with global changes in technology and expand its knowledge base to maintain relevancy:

> "Accounting education and training has moved forward tremendously as a result of impact of information technology, impact of expanded knowledge all over the world […] otherwise you are going to become irrelevant".
> (P24, ACD)

Decoupling professional knowledge trends, some interviewees (P23, P24 and P29) shared the view that traditional accounting and the rudiments of 'debits and credits' could no longer sustain the accountant. So, the technical accounting foundation based on book-keeping has become archaic and will be less significant with technological advancements. Understandably, technological changes and sustainability are widely accepted as a critical issue to the extent that they would activate '*reimagining the accounting profession'* (P02). All the same, global

knowledge expansion pushes the profession to adapt to changing circumstances beyond the technical focus on accounting, according to P23:

> "What has changed is the issue of debit and credit, they've taken the back seat and now no longer the in-thing [….] just staying with the technical aspect of your subject is not enough in the present economy, […] you need to become somebody that can adapt to changing circumstances."
> (P23, PAB)

7.1.2 International Regulatory Demands

Internationalisation was also identified as a factor in recent regulatory changes as business and accounting policies have followed an established foreign archetype to pursue local economic interests. Consequently, establishing the right standards and policies is often a determinant of attracting investors and capital into the economy. To satisfy the requirements of foreign investments, Nigeria adopted internationally accepted frameworks enforced by the State and its agencies in collaboration with PABs. One example is the adoption of the IFRS in 2012 and the International Public Sector Accounting Standards (IPSAS) in 2016. One interviewee detailed how the changes in these globally adopted regulatory mandates require accountants to become knowledgeable on the current and future updates of these accounting standards and requirements:

> "Once you adopt IFRS or you adopt IPSAS, you have to keep your education in tune with developments […] and therefore, you will have to be updating your members knowledge on what is happening with regards to international standards [in] accounting."
> (P27, HYB)

Accounting scandals and corporate governance challenges are part of the demands on regulations which have become much more stringent. As P23 and P27 emphasise, sustainability has become more evident because it is coupled with corporate governance codes issued by several regulatory agencies. One of them said:

> "Within this last five years, we have also witnessed the launching by the Financial Reporting Council of its code of corporate governance called the Nigerian Code of Corporate Governance, 2018. And within the code you also have some provisions relating to accounting practice."
>
> (P27, ACD)

Part E of the Nigerian corporate governance code requires a company's board of directors to have a sustainability policy comprising the environmental, social and community impact of business operations. This regulatory requirement frames companies as corporate citizens responsible to different stakeholders.

7.1.3 Labour Market Internationalisation

Several interviewees (P02, P22, P24 and P27) conveyed that changes in PAE are necessary because accountants are trained for the global marketplace and that global employment expansion provides opportunities for accountants to operate beyond the confines of one country.

> "If [students] are not up to date, then we're not training people that are employable especially in the international employment market. International employment matters because the world now is a global village."
>
> (P27, ACD)

The profession's approach to this orientation change among students is to engage in cooperation agreements whereby students can receive equivalent certification across several countries, ensuring global labour migration. These partnerships and alliances prove valuable for local PABs and educational institutions as professionals are already persuaded by the premium appeal of UK PABs:

> "You now have to know what's going on in the larger space. So, you see a lot more professionals going to get [UK PAB] certifications, not just relying on the local or Nigerian accounting bodies certifications".
>
> (P22, ACD)

Additionally, P02 mentions the influence of the IES as a framework that has helped standardise

the skills and expected behaviours of professional accountants and facilitate reciprocal arrangements among PABs from various countries.

> "Globally all professional accountancy organisations, those of repute, are usually guided by international panel of accounting education, IES, and those are the things I've told you how they are embedded in our syllabus. There are [also] regional cooperations or PAO to PAO cooperation."
> (P02, HYB)

7.2 Views and Interpretations of Sustainability

Interviewees' sustainability interpretations establish that consequences of unsustainability were already a part of the problems in Nigeria predating the use of the term sustainability. The social aspect of sustainability also resonates with several interviewees (P22, P25 and P27) with the perception that the sustainability agenda should address the country's social issues such as poverty, exploitation, unemployment and even insecurity. Worsening social indicators show why social sustainability has primacy, as P27 commented:

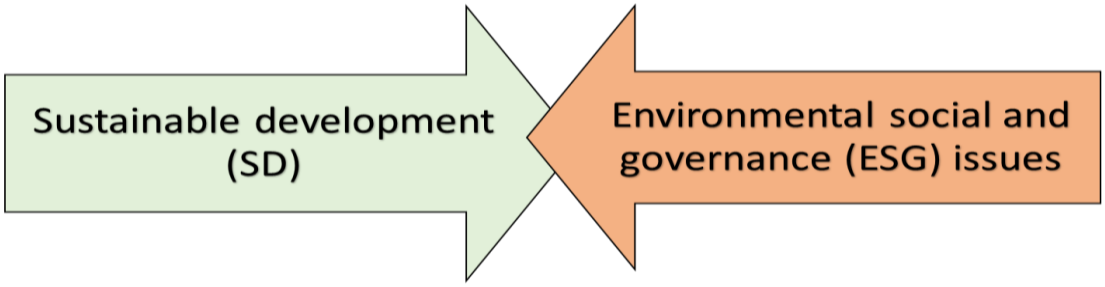
> "If you want to live a sustainable, better life. [...] We need to save our ecosystem. We need to ensure that we deal with a lot of social ills, unemployment, [and] insecurity".
> (P27, ACD)

The inclusion of sustainability in the Nigerian corporate governance regulations shows increased stakeholder awareness. However, asking some interviewees about their understanding of sustainability generated some ambiguity, with some simply responding that it means continuity. To provide some context for some interviewees, social and environmental issues were used interchangeably with sustainability to minimise confusion and to keep responses within the research scope.

Analysing interviewees' definitions of sustainability offered two views; sustainable development (SD) or ESG (see Figure 7.17 below). First, some interviewees describe sustainability from the widely acknowledged sustainable development stance embodying

concerns for human survival, future generations, and natural resource usage. On the other hand, the ESG view focuses on a corporate-led approach encompassing reporting, disclosure, business practices, management, and governance of social and environmental concerns.

Figure 7.17: Coinciding interpretations of sustainability emerging from interviewees



More than half of the interviewees offered interpretations of sustainability that combine ideas from these two themes, but their responses were grouped in the dominant perspective expressed. Both views appear to co-exist without tension because they are selectively employed based on the interests at stake. Regarding this problem, P32 acknowledges that sustainability is evolving and embraces several definitions:

> "Sustainability doesn't seem to have a particular definition as it's still evolving. But I know that it has been defined as managing the needs of the present without compromising the ability of future generations to meet their own needs […] People say it is PPP people, profit, planet, so I think I will look at it more as what we do in terms of financial activities, how we impact the environment positively while still trying to make profit for ourselves. And then the social impacts of our activities".
> (P32, REG)

7.2.1 Sustainable Development (SD) View

The interpretation of SD and SDG was echoed among different actor groups from academia (P29), a professional accounting body (P31), accounting practitioner (P30), and regulator (P32). Some key elements of the SD interpretations include acknowledging the importance of time when discussing current and future generations, the primacy of human survival,

intergenerational resource dependency and usage, societal responsibility for the environment and future generations, and equal opportunities for all, which are manifested in the SDGs. One interviewee rationalises these elements:

> "It's about future generation following the worldwide definition, future generation having a place that they can call their home, so the present generation meets their own needs but also allows future generation to meet their own needs […] and this will happen if we look at the way that the present people are using the resources".
> (P02, HYB)

The generally known ideas of sustainable development (SD) and the SDGs encapsulate the interpretations of sustainability for several interviewees. As one interviewee explains the prevalence of such views:

> "Sustainability issue is everywhere today, even in the Sustainable Development Goals […] However, I'll just give you a layman's definition, […] it has to do with how you use your resources today to ensure that the future generations are not left hanging."
> (P29, ACD)

More than half of the interviewees felt that sustainability has to do with the continuity of human life beyond the short term through resilient strategies and processes. The comment below from P24 shows this general thinking:

> "When you say sustainability, standing the test of time. You're talking of issues, processes that transcend beyond the immediate."
> (P24, ACD)

Another interviewee, P28, expressed a similar sentiment about the temporal nature of sustainability, further explaining this generalised meaning in relation to an organisation's survival.

> "An organisation in its operation should not take a short-term view in its strategy, it should have a long-term view so that it can operate in the long run because quite a number of activities in the short run might be rewarding to the organisation may in the long run

lead to problems. […] In general terms, humanity has to explore its environment in such a way that we can survive".

(P28, PAB)

7.2.2 Environmental, Social and Governance (ESG) View

Interestingly, some proponents of the SD view later go further in their definition to adopt accounting language that emphasises 'financial activities'. The ESG perspective was commonly expressed by P23, P25, P27, P29 and P32 as it ties sustainability to accounting, business strategy, reporting metrics and assurance services. The ESG definition also frames sustainability in the Nigerian 2018 Corporate Governance Code and other related regulations to satisfy stakeholders' information needs. Accountants are much more accepting of this framing because it embraces the typical finance language and familiar expectations. These comments below exemplify the use of accounting language and practices to define sustainability:

> "Sustainability is part of the reporting that are meant to assist these stakeholders to understand the operations of the companies […] it also makes the organisation to be held responsible for environmental issues around where they operate. So, they are expected to prepare a report to show how far they have incorporated those areas of economics, governance and the social and environmental issues into their operations."
>
> (P23, PAB)

> "From [an] accounting perspective, sustainability is considering those measurements and largely non-financial that can inform economic, social, and environmental decisions and of course recently to what extent it also affect governance. And so, such efforts need to provide information to stakeholders, particularly investors, on the effect of our activity on economy, on the environment, and social issues, and governance issues".
>
> (P25, HYB)

Whilst corporate activities and responsibility remain the essence of this perspective, it is also informed by professionals seeking to get on board with the trending view of sustainability as

encompassing ESG issues. In one instance, P27 points out that ESG is now EESG with the addition of Economic as the first 'E' in the updated acronym:

> "When we talk about the ESG, environmental social governance, we usually now expand it to say EESG, now EESG is actually what is even more current, EESG is economic, environmental, social, governance, you put them together in sustainability."
> (P27, ACD)

Having addressed the interpretations of sustainability, the next part of the analysis highlights the factors that conditions integrating sustainability into PAE.

7.3 Influential Factors for Sustainability Integration

Several interviewees (P22, P29, and P31) emphasise the ecological damage in the oil and gas sector and the social injustice of multinational extractive companies and their affiliates towards indigenous communities as one of the justifications for sustainability transition in Nigeria. Sustainability is a global challenge with variations in local implications demonstrated in this statement from P29:

> "Now when you go to Niger delta region of Nigeria, today, where oil or crude was discovered in Oloibiri precisely in Bayelsa state, when you get there today it's just a place where you cannot plant anything, nothing can grow in there because of the environmental damage that has been caused to that environment. Now, these are just a few examples I've given to you, so it cuts across the world because of the global challenges."
> (P29, ACD)

The oil and gas sector is the mainstay of the Nigerian economy and accounted for 41% of government revenue in 2021[21]. At the same time, the consequences of the oil and gas activities of multinational companies have resulted in significant environmental and social scandals, which has made sustainability of greater interest to this sector. Some interviewees (P22 and P31) contend that sustainability gained traction and relevance for professional accountants

[21] Figure based on Central Bank of Nigeria (CBN) 2021 Statistical Bulletin: Public Finance Statistics.

working in this sector as they are exposed to the social and environmental risks that affects their operations:

> "There are some sectors that sustainability issues became prominent for them because of the kind of industry, for example, anyone who works in oil and gas has the history of oil spills in Niger Delta, the gas flaring issues, the backlash from stakeholders and international shareholders of people like Shell who had boycotts because of environmental pollution and the likes. It is probably more real for those who are in sectors that have very high environmental risks."
> (P22, ACD)

To appreciate the various issues affecting sustainability integration in Nigerian PAE, the themes in this section highlight the motivating and challenging factors.

7.3.1 Motivating Factors

Responses to questions about the motivations for sustainability integration in PAE were grouped into three themes: investor preference, international pressure, and regulatory mandates. What is striking about these themes is the interconnectedness with the previous discussion of globalisation in section 7.1. In an emerging economy like Nigeria, several investors are international players importing global developments into the national context. In attracting these investors, regulators and businesses must imbibe global best practices. On this issue, P22 commented:

> "Because of the regulatory and shareholder pressures, so investors now especially if you're a company, or an organisation that has investors that are not just locally based, or you're not just a family business, if you have a group of shareholders, or you are listed on stock exchange, like I said […] those sustainability metrics or issues are coming into the private sector space, they're coming into boardrooms, they're coming into the reports."
> (P22, ACD)

a) Investor Preference

Several interviewees previously defined sustainability as part of the information required for stakeholders, particularly investors[22]. Following this, some interviewees (P22 and P28) reason that the increasing demand of investors and shareholders to include social and environmental metrics has urged organisations and the accounting profession to act on sustainability. For instance, P22 thought that sustainability is a rising trend because of the changing preferences of shareholders:

> "For the larger body of accountants, it's becoming a new trend, because they're starting to see that the shareholders or stakeholders that they have to prepare reports for are not just interested in financial accounting. They're interested in accounting that takes a look at other metrics, other aspects of whatever business organisation they are preparing for."
> (P22, ACD)

It is also noteworthy that these investors/shareholders have more influence because of their international status, as mentioned by P28:

> "The other motivation towards sustainability is the fact that institutional investors of the organisations now want to see how the organisation are responding to the environment, how they see the various capitals. […] a good number of institutional investors, particularly if you have foreign investors are involved because in their own domain, they subscribe to such sustainability reports. So, they put pressure on the leadership and management of organisations to be mindful of sustaining the environment leading to sustainability reporting".
> (P28, PAB)

A more practical example of international pressure happens when multinational enterprises introduce headquarters' expectations to the subsidiary in Nigeria. It is one of the ways to spread and legitimise sustainability in the Nigerian accounting landscape, which is later transmitted into the education of accountants, as P02 reported:

> "An auditor told me that one of their clients prepared a sustainability report. If they

[22] See previous explanations of sustainability views in section 7.2 of this chapter.

prepared that sustainability report at the time when nobody was talking about sustainability in Nigeria, they prepared this because the head office wanted that information. […] So, those kinds of pressures will therefore make it ok, [that] there is a need for this, and then the curriculum would have to be tweaked to accommodate these needs."

(P02, HYB)

b) International Pressure

Following closely from the first theme, interviewees were clear that the international community drives attitudes and actions on sustainability. Responses from P02, P24 and P32 show how transnational emulation justifies sustainability within PAE:

"Everybody's thinking, sustainability. So, when you come from the UK, US, all of us are thinking the same. We are not thinking short term because we have adopted all those things".

(P24, ACD)

Other responses show that Nigeria is concerned about being excluded from the sustainability agenda and the fear of accountants becoming redundant. P32 comment demonstrates why sustainability is perceived as necessary due to the global convergence drive:

"I think the motivation really is what has been happening to the environment, the fact that well, there's a global drive towards it. And so, Nigeria cannot be left behind. […] it's an evolving area, accountants will always have to be relevant. So, if they choose not to go in that direction, then their relevance will become minute in the scheme of things."

(P32, REG)

c) Regulatory Mandate

The regulatory environment in Nigeria has changed in response to investors' expectations and the global sustainability action plan. P28 details several national regulatory agencies prioritising sustainability in their guidelines and codes, including the Financial Reporting Council of

Nigeria, Securities and Exchange Commission (SEC), Central Bank of Nigeria (CBN), and the National Insurance Commission (NAICOM). Several interviewees (P22, P23, P27, P28 and P32) reported that a considerable proportion of Nigerian companies especially listed firms, have complied with these regulations because various State institutions are enforcing the mandates. As one said:

> "Even as part of corporate governance, sustainability is embedded."
> (P32, REG)

Although regulations have created awareness and some appreciation for sustainability in organisations, the scope of these issues has been limited to corporate governance or ethical business practice. Such categorisation has resulted in confining accountants' understanding of sustainability as a means to an end which has implications for how accountants are educated about sustainability. P23's comments below alluded to this:

> "In Nigeria the sustainable banking principles [state] that some projects that don't have a good sustainability environmental impact assessment will not be funded without those regulations. Accountant must be able to understand all these things and to ensure that he contributes to the strategic decision of the company. So that it will assist him also in raising finance."
> (P23, PAB)

7.3.2 Challenging Factors

After discussing the motivation for sustainability integration, interviewees also had the chance to speak about the challenges. One interviewee with experience in the accounting profession and academia commented on the challenges:

> "I think, [sustainability] issue that has some difficulty in terms of expertise, in terms of technology, in terms of the cost. […] even the Financial Reporting Council of Nigeria, that is the major regulator in this area, has not also taken it as a priority. So, there is the challenge from points of political will, from the point of expertise, from the point of cost, from the point of stakeholders' readiness and acceptance."

(P25, HYB)

Other interviewees reiterated some key hindrances expressed in the statement above. The analysis identified four core issues as challenges to sustainability integration in Nigeria; these are discussed in detail below.

a) Accountants' Lack of Expertise and Exposure

Some interviewees (P02, P30, and P32) acknowledged that accountants' lack of awareness and adequate exposure to sustainability hinders its integration into PAE. P02 mentions that a lack of international exposure is one reason why some accountants view sustainability as inconsequential:

> "One other challenge is, lack of awareness, because I've told you how this knowledge flows from international conferences and all that, how many people attend those conferences, few. So, if you are a local auditor and you don't have [an] European head office, you have not attended those conferences, you are not aware of these issues, and when you bring that issue, they would then [say], 'What are you talking about? What is sustainability?"
> (P02, HYB)

Expertise in sustainability is limited in Nigeria as it is still emerging. According to P32, the other related challenge is that the older generation of accountants may find it difficult to adopt accounting for sustainability because they are not sufficiently informed:

> "The second challenge would be [that] so many of us who are relatively old accountants who had been practicing before ESG came in, and a challenge would be lack of knowledge. And so, we need to catch up very quickly".
> (P32, REG)

Likewise, another interviewee commented: '*are [we] even aware that we have to incorporate sustainability into accounting education'* (P30). The lack of awareness affects the

responsiveness of institutions to incorporate sustainability into education with varying degrees of implementation among relevant organisations.

b) Paucity of Sustainability in Local Business and Accounting Practice

The lack of expertise is intricately linked to deficiencies in sustainability practices for organisations without substantial regulatory obligations or foreign stakeholder involvement. Sustainability regulation concentrates on public-interest companies in Nigeria[23], neglecting many organisations for which sustainability is yet to take root. As one interviewee explained, accountants may see sustainability as a foreign and abstract concept that is inapplicable to local businesses and accounting practices:

> "It is not something tangible, it's not something they are practicing, it is within a theoretical realm. So, if you say ok let us put this thing there, somebody will ask you 'does [this] apply in our environment? and we are not in the UK, when you get to UK you can do that there'. One person told me how he did sustainability abroad, and when he came to Nigeria, nobody knows anything about that, the company where he works, they don't provide him with opportunity to practice sustainability".
> (P02, HYB)

Several interviewees (P02, P22, P23 and P28) expressed widespread concerns about accountants obtaining sustainability knowledge without being able to apply it to fulfil their respective roles in organisations. Accordingly, the available opportunities to practice sustainability in Nigeria are typically non-existent in most private organisations, including small and medium enterprises and family businesses. Both P02 and P23 express the disconnect between accounting knowledge and practices on sustainability.

[23] Public-interest companies include those listed on the stock exchange, banking sector, or the oil and gas sector as these are highly regulated.

> "I don't think there are serious challenges on that, except the candidate's understanding, seeing how it works in their companies, but where the companies are not practicing it, it will just become a theory to just learn."
>
> (P23, PAB)

c) Relevance of Sustainability to the Accounting Function

Some interviewees (P22, P25, and P30) reported that accountants believe sustainability is an additional bottleneck as they could not relate their job's daily tasks to the bigger picture of environmental and social concerns. Below, P22's statement exemplifies the apprehensive mindset of some professional accountants:

> "You do have people say no, 'accounting is really hard as it is why are we adding sustainability to it, why are you adding social? What's the relationship between new my two columns of balance sheet and this social?' […] there's that resistance of this is completely different."
>
> (P22, PAB)

Another interviewee reveals how accountants would push against the necessity for sustainability education, given that it has no bearing on the job description:

> "I'm to make sure I have generated daily transactions or events, I analyse them, process them, generate financial statement for the organisation', what has sustainability got to do with it?"
>
> (P30, ACP)

What stands out from P30's statement above is that some accountants claim '*sustainability is for others, not us'*, inadvertently choosing to exclude themselves from such issues. It is unclear what 'others' would mean in this instance, but non-accounting professionals could fall into this category which is usually the case when new occupational domains are emerging, as with the case of sustainability (Schaltegger and Zvezdov, 2015; Usmani, Davison and Napier, 2020).

d) Cost of Integrating Sustainability in PAE

> "The major challenge, one of it is majorly costs."

(P24, ACD)

Some interviewees (P24, P25, and P30) assert that sustainability transition in the accounting field will come at a cost. Talking about the cost implications, one interviewee openly expressed the various funding needs for sustainability education for accountants:

> "It might not be very easy to talk about learning sustainability in the way I'm advocating, without looking at the financial cost implication. […] if we see it as a very critical aspect of our future, then fund could be made for people to learn, learn well, and also teach others, sustainability education needs to be supported a lot with our resources."
> (P30, ACP)

7.4 Actors influencing PAE Changes

The prior section clarified the influential factors for sustainability integration in PAE, whereas this section elaborates on the roles of local and foreign actors and how they interact to influence the process of change. Relational issues are at the core of the PAE structure in Nigeria, as detailed by an overwhelming majority of interviewees, whose statements indicate that PAE in Nigeria is characterised by competition among the professional population, powerful forces of the State, ties with the UK profession and international professional affiliations. Still, there are evident distinctions in the positioning and interactions of these organisations, particularly when foreign organisations attempt to colonise the context.

7.4.1 The Accounting Profession and its Interaction Partners

PAE is jointly operated by two professional bodies in Nigeria, ICAN and ANAN. Although these two PABs have the same legal standing, their paths to professionalisation happened through different tactics and timelines[24]. In response to the question about the structure of PAE in Nigeria and the actors involved, interviewees promptly identified PABs as gatekeepers

[24] See chapter 5 for further discussion of the accounting profession in Nigeria.

responsible for controlling membership by specifying the rules of entry, certification process, and post-qualification requirements. Confirming this, P23 said:

> "Professional Accounting Education in Nigeria is based on each of the professional bodies, they have their syllabus, they have their rules, students will register with them as a student member, and then they will have to do their exam".
> (P23, PAB)

Both PABs in Nigeria are deliberate in distinguishing themselves through their education processes. While one only admits degree holders, the other admits those from lower educational levels (secondary school) who have completed the ATS qualification [25]. Notwithstanding, they both allow non-relevant degree holders to join the profession with exemptions granted based on relevance to the accounting discipline.

> "For ANAN, you must be a graduate before you commence your professional examination. But for ICAN, you can start even from the lower educational levels".
> (P25, HYB)

Based on these descriptions above, there are some noticeable differences and similarities in the PAE function in Nigeria. Given the different orientations of the PABs, interviewees reveal other distinctions detailed below on the profession's interactions with adjoining institutions, such as educators and employers.

a) The Accounting profession and Education institutions

Stakeholders in the structure of PAE working closely with the profession are the education institutions. Tertiary institutions are crucial to the profession in that they are responsible for the inputs that constitute trainee professional accountants:

[25] ATS qualification is jointly administered by ICAN and other professional bodies in West Africa under the umbrella of the Accounting Bodies West Africa (ABWA).

> "Tertiary institutions, in terms of polytechnics, in terms of universities, there are key stakeholders because they are the ones that produce the inputs into [the] professional qualification".
>
> (P25, HYB)

The academic entry route remains widespread, facilitated by higher education institutions. In recent years, one PAB made changes to strengthen its relationship with tertiary institutions through accreditations and mutual agreements. In contrast, the other PAB has avoided this approach. As one interviewee highlighted, universities are convinced that their relationship with the PAB is beneficial because they can use this to attract students to their degree programmes:

> "The training of our students has actually changed from the normal traditional professional to now an integrated platform. And most of the universities bought into that because they also want exemptions from ICAN […] ANAN has not started that it's only ICAN till today that is doing that. So apart from National Universities commission coming to accredit, ICAN will also come to accredit BSc Accounting programme".
>
> (P24, ACD)

Alternatively, tertiary institutions also engage in mutual agreements that are much more demanding as PABs stresses the absorption of its syllabus into the academic degree, insists its members teach core subjects, and regularly reviews the examination processes in line with their professional standards. Therefore, a PAB can assert control over PAE even at the pre-qualification level through this:

> "We have what we call the [mutual agreement] where [students] will only be writing the final part of the exam; the review is thorough […] So they see that all things are within the standard of the profession. So definitely there is a control on professional accounting education by the professional bodies."
>
> (P23, PAB)

Both P23 and P26 emphasise that one of the PABs has developed a relationship with the

National Universities Commission (NUC)[26] to influence the Benchmark Minimum Academic Standards (BMAS) used by all universities in Nigeria. PABs collaborate with national education regulators, grant significant influence on PABs in furthering their agenda of alignment, and the formalisation of convergent education practice across the country:

> "The [PAB] take it upon itself, to prepare and produce a new set of curricula for accounting education, and we presented to the stakeholders, the Nigerian Board of Technical Education, that takes care of the polytechnics and colleges of education and the NUC-Nigerian Universities Commission, and we presented them this curriculum for adoption."
> (P26, PTP)

Tertiary institutions are essential in the accounting education process in several ways, but their influence is constrained by education regulators and PABs. However, academics are involved in setting the benchmarks and partaking in programme accreditations of PABs and the NUC.

> "We also make use of most of our members that are in academics, a part of the syllabus review committee. And of course, I know that recently, I've also been able to influence the NUC BMAS on accounting. The current NUC BMAS that is being prepared [has] our input."
> (P23, PAB)

Interviewees also identified other education institutions known as tuition centres that are responsible for teaching the professional qualification which is identical to the PTPs in UK PAE:

> "There are a number of tuition houses who aid the candidates, by teaching them and helping them to pass their exam through the knowledge sharing or acquisition that goes on through these tuition houses, the universities and polytechnics are also stakeholders in that."

[26] NUC is the regulatory agency for all universities in Nigeria and produces education standards called Benchmark Minimum Academic Standards (BMAS)

(P32, REG)

Nonetheless, this approach of outsourcing tuition is not the prevalent norm across the profession, causing disparity and tensions between the two Nigerian PABs. ANAN conducts the teaching element in its professional qualification process, while ICAN entirely outsources it . Some interviewees shared the opinion that education delivery controlled by the PAB ensures distinctive quality control over professional training and safeguards 'professionalism' in the education process:

> "Professionalism has been solidly established because ANAN has a college for the training of accounting professionals. And the professional college requires that somebody must be a graduate of accounting […] So you go in there, you will pass through one-year rigorous training, lectures, presentations, research, taking you through all the different fields of accounting and allied areas. And then after that, you pass through an examination."
> (P27, ACD)

b) The Accounting Profession and Employers

The profession's relationship with employers is influential because employers are informed of incoming changes in PAE and can offer feedback in the process. Interviewees indicate that not all employers have an input into this feedback process. PABs usually consult major employers such as auditing firms, federal tax authorities, and larger private organisations, as P23 stated:

> "Syllabuses are reviewed, and they are exposed to stakeholders, the major auditing bodies in Nigeria and also major companies in Nigeria that use professional accountants. We send the draft syllabus to them, for them to review and to see whether those study outcomes we put there will be enough for their own expectation of a chartered accountants."
> (P23, ACD)

Ensuring employability of qualified accountants justifies PABs' keen interest in the opinions of significant accounting employers. P28 elaborates that the role of accounting firms as

employers is critical as they make considerable investments in training their staff. They have a dual role as they are also involved in the internal activities of PABs as a part of its membership.

> "[The Firms] are major stakeholder in employing accounting graduates and also, they not only employ them they use these professional accountants to deliver service to clients, and so, they're interested in the quality of the graduates and the professional accountants that we produce. [….] Usually, many firms will take in graduates as trainees into their system and they will require them to be taking professional exams as they progress, and they provide a veritable source of work experience for our students. So, they role is vital and again they play a very prominent part in the Institute".
>
> (P28, PAB)

In another instance, PABs draw on their diverse membership from various employers to deduce information about knowledge gap and employer expectations that eventually drives changes in the curriculum:

> "We did a survey recently, that was last year trying to look at get feedback from members in practice, members in civil service, to know what their employers feel are the skill gap as far as our memberships are concerned. And the feedback we got has indicated, the kind of changes that should be done to curriculum, the kind of knowledge gap that exists that needs to be filled from the professional angle in terms of what is taught or what is examined."
>
> (P25, HYB)

7.4.2 Role of the State

In Nigeria, the State determines the direction of the economy, and has increased oversight of business and the accounting function through the appointment of numerous regulators in different sectors. One interviewee further explained that:

> "In Nigeria, the Government has overwhelming influence on the economy. The Chartered Accountants we produce are to service the economy. So whatever policies Government carve it will definitely affect the fortunes of our members and also the training. […] Government also appoints those regulators. The regulators that we mentioned earlier,

> starting from the Financial Reporting Council. […] so, government through the influence of the Financial Reporting Council would affect the training of accountants."
> (P28, PAB)

Most interviewees acknowledged the political authority of the State and the power of regulatory agencies over the Nigerian accounting profession. The State establishes absolute control over the jurisdictions of professionals in Nigeria and sometimes the State's relationship with the PABs can become volatile, as P02 suggests:

> "So, every profession is regulated, […] first it comes into being by an act of parliament in Nigeria, so it is the state regulation that give rise to all the profession in the first instance. […], we've come to know that the legislator can wake up one day and pick your act and push it for amendment without consulting you, without you being in the picture, that's what we are going through now".
> (P02, HYB)

Also, duplicated regulations from state agencies make the Nigerian context much more challenging for accountants. Few interviewees point out the assortment of codes that overlap in many aspects, noting the issue of reconciling the rules and guidelines replicated by several government agencies:

> "There are some grey areas that the Financial Reporting Council and even the CAC[27] are really trying to reconcile not only that there are several other laws that affect accounting practices."
> (P27, ACD)

7.4.3 Influence of UK PABs

Despite the stringent regulatory environment, some UK PABs are active contenders in providing accounting qualifications in Nigeria. The Nigerian market has vast potential, and it has become a customary practice for UK PABs to expand beyond national boundaries to

[27] CAC is the Corporate Affairs Commission which is the agency responsible for registration of companies in Nigeria.

lucrative markets (Briston and Kedslie, 1997; Richardson, 2017). Most interviewees (P02, P22, P25, P24, P29, and P31) were upfront about their perceptions of the roles of UK PABS in Nigeria. One of them commented on this:

> "Nigeria, as a country, has a regulated environment, and within that regulated environment, we have the Institute of Chartered Accountants of Nigeria, regulating the practice also the Association of Nigerian Accountants of Nigeria regulating the practice in Nigeria, but within still within that we have other professional bodies like the Association of Chartered Certified Accountants."
> (P31, PAB)

UK PABs do not have control over accounting practice as that is reserved for Nigerian PABs, but they encroach on the jurisdiction through their qualification offerings. Furthermore, the Nigerian environment also has developed a sentiment for international qualifications as a signal of superior expertise. The influence of UK PABs is evident in accountancy education, not just at the professional level, as some employ competitive strategies through accreditations and exemptions offered to Nigerian Universities. Interviewees from the academic community applaud the influence of these UK PABs for facilitating the internationalisation of Nigerian accounting education and making it easier for students to access these international qualifications. An accounting academic interviewed comments on changes in the landscape based on the actions of some UK PABs:

> "From the professional perspective, the likes of ACCA, CIMA, and the rest have also played a key role in influencing what is happening in Nigeria [….] they've changed the landscape. They made the world flat by coming to Nigeria, now accounting in Nigeria and what students are learning [and] studying here is not farfetched from what is happening elsewhere in the world."
> (P29, ACD)

Furthermore, UK PABs' impact continues beyond the PAE structure; they influence the economy by collaborating with the Government, building capacity in the public sector, and

emphasising the quality of accounting practice in Nigeria. All these are enabled by several tactical partnerships with local associations, as expressed in the comment below:

> "So, the perspective of the [UK PAB] is to focus on increasing quality, to focus on increasing engagement and building capability. And in the field of building capability. The [UK PAB] has enhanced its relationship with other professional bodies, like the CITN[28] , we also have some relationship with the Association of Nigerian Accountants. And we've done a lot of things together in combating corruption in Nigeria, in increasing the quality of practice in the public sector."
>
> (P31, PAB)

While some interviewees discuss the direct impact of UK PABs, there are also some noteworthy findings about the representation of UK PABs as ideal standards for PAE. Some supranational institutions, such as the World Bank, have commissioned projects involving capacity building and standardisation of professional accounting practice and education between UK PABs and Nigerian PABs[29]. P02 further illustrates this point:

> "You can see an input from the practice in [a UK PAB]. So, for example the case study, a case study is one of the last papers, and I can tell you is an input from [a UK PAB], that informed that subject in our syllabus. So, you can see how other professional bodies curriculum can also impact on our own".
>
> (P02, HYB)

It appears that partnerships between UK PABs and Nigerian PABs established through foundational professional ties have been maintained over time. Moreso, the influence between foreign PABs and Nigerian PABs has been further enabled IFAC membership, which is covered in the next section.

[28] CITN- The Chartered Institute of Taxation of Nigeria is the professional body for tax practitioners in Nigeria.

29 The various capacity building projects affecting PAE in Nigeria was discussed in Chapter 5 of the Thesis

7.4.4 Influence of IFAC

Views expressed by interviewees (P23, P25, P27 and P28) suggested that PABs are committed to using IFAC's International Education Standards to validate the quality of accountants produced in Nigeria, noting that:

> "Once you are a professional, especially if are a professional body that is recognised by IFAC, coincidentally both [Nigerian PABs] are IFAC member bodies. You will also be expected to key into the International Accounting Standards on education."
> (P27, ACD)

Compliance with IFAC educational requirements is the first step to facilitating cooperation agreements with other foreign PABs:

> "Because ICAN is a member of IFAC, we have to go by the principles of IFAC, especially in the professional education we have to abide by principles. [….] And of course, we also try to have a working on agreement with some of the international professional bodies and one of the things that they want to look at is how far our syllabus is in agreement with that of the international bodies".
> (P23, PAB)

In addition, some view the influence of IFAC through the peer review processes and curriculum comparability:

> "I met other directors of professional accountancy organisations in New York, in IFAC office, and we compared … curriculum, we compare delivery methods, […] And then IFAC also noted that, so I want to say that the influence that we have on each other is from the point of peer review and trying to compare curriculum."
> (P25, HYB)

Although IFAC does not have a mechanism to enforce compliance, it has established a benchmark that typifies the skills and expertise of an accountant globally.

7.5 Pathways for Integrating Sustainability into PAE

Discussing the approach and process for integrating sustainability in PAE led to themes on the different change pathways which also resonates with the prior section on the actors influencing PAE changes. Some pathways are already evident based on the activities of PABs and the emergence of sustainability as a distinct field of practice in Nigeria. Yet, the accounting profession advocates for the regulatory directive as the most effective enabler of sustainability integration into all areas of accounting, particularly education. The themes in the following sections further provide insights into these various pathways to integrate sustainability into PAE.

7.5.1 Initiatives of PABs

Nigerian professional bodies diffuse trends and practices because of their international affiliations. PABs encourage organisations to adopt sustainability practices by using the business case element of exams to influence practice to change. P28 comments:

> "[The PAB] tries to encourage organisations to adopt sustainable practices and start reporting on it. Again, many investors, in fact, let me say, the society looks favourable at an organisation that give a positive report on sustainability in its operation."
> (P28, PAB)

In addition, PABs provide opportunities for accountants to learn about emerging issues such as sustainability. The profession's educational programme strongly influences practice, especially in developing continuous learning capacities through the Mandatory Continuing Professional Development (MCPD) to adapt to changing demands and expectations. One interviewee expressed that:

> "What we do is to improve on our MCPD and also incorporate those things we are bringing into the syllabus into our MCPD in such a way that even though they have qualified years ago, they will be able to at least put themselves in a situation or position

where they're able to align with the new developments emerging issues in the accounting environment."

(P26, PTP)

The profession also advocates for sustainability by working with regulators in the Nigerian environment. PABs see themselves directly having a role in sustainability, and some have even created a committee to champion this role:

> "I am chairing the sustainability reporting initiatives of ANAN [..] we have gone far to interact with CAC, with the Nigeria Stock exchange, the SEC, and some key stakeholders to see how we can key into the global issue of sustainability. […] we have identified some Sustainable Development Goals."
>
> (P25, HYB)

Another sustainability initiative powered by a PAB is the creation of the Nigerian Integrated Reporting Council (NIRC), aimed at promoting integrated reporting in accounting practice and regulation. Integrated reporting is a well-established framework in sustainability accounting practice that proposes incorporating social and environmental aspects into traditional accounting reporting models. The NIRC initiative has attracted the interest and participation of regulators, practitioners, and the wider business community as they are in a '*rush over sustainability'* as P30 described.

> "Like Nigeria, for instance, we're looking at Nigeria Integrated Reporting Committee […] Now, I'm happy they are taking it from ICAN level and ICAN is driving it. So, which means that if we get ICAN to buy the concept, and use, and that [the] concept is incorporated into the curriculum."
>
> (P30, ACP)

7.5.2 Emergence of Sustainability Professional Occupation

As sustainability is still nascent in Nigeria, some groups have taken up this occupational space through the Association of Sustainability Professionals of Nigeria (ASPN),[30] led by the collaboration of CSR practitioners and academia. P22 clarifies that this organisation has evolved from the early days of CSR practitioners but has decided to professionalise its operations and assert its expertise on sustainability matters:

> "Let me paint a picture of what sustainability is right now, in Nigeria. So, for example, we just launched the first Association for Sustainability Professionals [in] Nigeria, we just had the first induction last week. So, sustainability as a field or profession has existed, you've had CSR team members, you've had some sustainability professionals in organisations, but it's now becoming something that's seen as a profession."
> (P22, ACD)

This new entrant also seeks to provide sustainability education and development for members, build a network for sustainability professionals, and advocate sustainability issues in different sectors of the economy. P30 explains that this organisation is already building a curriculum that will significantly shape the sustainability practice and solidify the position of its organisers as leaders in the field.

> "I want to believe that as the [sustainability] concept evolves with us in Africa, our curriculum will begin to shape itself, for instance, we have Nigerian Association of Sustainability Professionals, they are also coming out with a curriculum which I think once people follow it, it will be able to help them."
> (P30, ACP)

Conversely, P01 believes accountants must re-assert themselves in the sustainability space and take their 'rightful place'. The usual argument against accountants operating within sustainability is that their role and competencies have limited relevance to sustainability

[30] ASPN was formalised in 2019 as a non-governmental organisation and was inaugurated in 2020.

knowledge and practice which was also mentioned as a challenge for integrating sustainability into PAE. And now professional accountants must redefine themselves to contest in the sustainability space as the comment below illustrates:

> "In Nigeria there is a group that emerged, they call themselves sustainability professionals, so sustainability professionals are the ones that are claiming that they are doing the sustainability work. It's not going to be done by the accountant, and when you tell them they say, 'No, accountant is for number crunching. They are not in the sustainability space.' So that is the uncertainty about reimagining where the accounting profession will be headed to, but hopefully the accountants will bounce back to take the space and assert himself in that space."
>
> (P01, HYB)

When there is increased demand for sustainability expertise, supply follows to fulfil such demand. Consequently, accountants will not be the only professional group interested in the sustainability space, which can result in boundary disputes between different factions.

> "You're seeing more interest by professionals, looking to move to the sustainability space. So, you're seeing more people who work in governance, who are probably company secretaries or secretariats of companies looking to want to understand sustainability reporting."
>
> (P22, ACD)

7.5.3 Regulatory Measures

Several interviewees (P22, P25, P30, and P32) support enforcing sustainability through a regulatory regime. For instance, the adoption of integrated reporting was viewed as an effective way of diffusing sustainability into practice and education relying on established Government agencies such as the Nigerian Financial Reporting Council, as P25 suggests:

> "If [the] Federal Government pronounces and it gives the responsibility to Financial Reporting Council of Nigeria, and the Financial Reporting Council of Nigeria comes up with a roadmap for adoption [and] implementation of integrated reporting, it will make a

lot of sense. And it will then become accepted nationally, and effort will be put in, funding will be put in to address the matter."

(P25, HYB)

As expected, proposed regulations centre on reporting aspects of sustainability above all others. The sense amongst interviewees was that sustainability without nationally driven policies will not accelerate changes in education to equip accountants with the necessary knowledge and skills. The shared expectation is that standards and guidelines provide an undisputable justification for training accountants on sustainability but follow the reporting, assurance, and compliance model that accountants venerate. The comments below depict the proponents of the regulatory pathway:

"I would think that little bit of regulation might be very helpful in how to teach it and how to practice it. If we regulate how to practice it, then that'll have the backward integration effect on how we teach it".

(P30, ACP)

"So definitely starting from the standard or the policies, and then it will trickle down into class and then into what every student of accounting learns, and what every accountant in Nigeria kind of knows".

(P22, ACD)

One let-down with regulation as a pathway is the pace at which change can be implemented as it takes considerable time and several consultations for laws to be adopted and enforced. Hence, there could be significant delays despite the urgency of sustainability globally and in the Nigerian context.

"I do not see a standard that has to be adopted immediately. So, there's usually a timeline for adoption, it could be the next reporting date, it could be two years' time, but at least there's a reasonable period within which you should adopt that help enables you to understand what the new requirements is to also plan for it, there are times when changes will have to be made to your system, to your policies to the principles that guide you."

(P32, REG)

7.6 Implications of Sustainability integration in PAE

Integrating sustainability into PAE will create various allied changes in accounting more generally. This section examines the interviewees' responses to the follow-up question about the effect of incorporating sustainability into PAE, which have been classed into two central themes: mindset and skills reformation, and change in professional roles.

7.6.1 Reformed Mindset and Skills

Accountants can adopt a pragmatic perspective that bridges the conflict between the business mindset (profit-making) and NGO perception (philanthropy) when they seek to understand what sustainability means for business and accounting. One interviewee (P22) was assertive about sustainability education offering this changing mindset termed the 'sustainability lens':

> "Once that mindset change happens, then you see that… Oh, it's not about being an NGO is about operating responsibly. […] once they have that sustainability mindset, they look in through that sustainability lens, and I think that's really what I would say sustainability should be."
> (P22, ACD)

Sustainability thinking is also linked to holistic thinking, whereby accountants will cease to focus on the organisation and think beyond financial implications. P24 associates sustainability thinking to systemic thinking and strategic thinking, whereby accountants can integrate information under the principle of longevity to make decisions:

> "If you integrate the sustainability principle into that curriculum, you already create sustainability knowledge from day one. […] to the extent that when you are thinking, your thinking is more of systemic thinking".
> (P24, ACD)

Having a sustainability mindset can facilitate collaborations with other knowledge fields. P30 suggests that accountants will need to work with other professionals to have a holistic focus beyond finance:

> "I think it will help accountants; it's going to make accountants think more holistically rather than just focusing on the finance aspect. […] And how accountant can also work with other professionals in unison to achieve the global agenda on sustainability."
> (P30, ACP)

7.6.2 Reorganised Professional roles

With a reformed mindset professional accountants can realise their roles in the sustainability agenda and apply their expertise where needed. P02 alluded to the many dimensions of change that underlie shifting roles whereby accountants retain their core competencies:

> "The migration to the new sustainable ways of doing business, and that's where the accountant is needed. […] And if that is the case then sustainability will ensure that the way businesses create value will change, and the way they see their value, the value created will also change. With that change then the role of accounting also in businesses will also change"
> (P02, HYB)

Some other interviewees thought accountants would obtain new skills through sustainability education because of how their role will evolve. P32 perceives the change implications to be more expanding the accounting function and inclusion of broader reporting dimensions for businesses, meaning that accountants will need to learn and adapt as sustainability develops in Nigeria.

> "It will just broaden the horizon of an accountant. […] So, you're reporting on financials, you're also reporting on corporate governance and other environmental matters, or ESG matters".
> (P32, REG)

The role of professional accountants is often shaped by regulatory pressure, which can force an expansion of roles within their organisations. P22 emphasises a need for more sustainability professionals from various disciplines:

> "I'll say the job descriptions of financial professionals are evolving because of these regulatory pressures […] So, there's still that need for more professionals or sustainability professionals. So, people who are in the accounting and governance space are usually doing corporate affairs, you're seeing that a lot of them are now shifting to get more skills and sustainability and then start working in those roles in their organisations."
> (P22, ACD)

7.7 Summary of Findings

This chapter details interviewees beliefs about the drivers of PAE, interpretations of sustainability, factors conditioning change, the actors influencing change, and the emergent issues involved in the process. The interplay of international and country-specific forces drives PAE changes. The profession seeks legitimacy by prioritising globalised professional trends, regulatory demand, and employment market shifts. Sustainability is nascent in the field, as interviewees rarely mentioned it as core to PAE changes. Regardless, the analysis found evidence of sustainability emergence in a recent corporate governance regulation issued by a national regulatory agency.

There is evident concern about the ecological damage caused by multinational oil and gas companies and the lack of social responsibility for communities affected by the extractive activities of these companies in Nigeria. However, interviewees' interpretations of sustainability adopt global language such as SD and ESG to define their familiar experiences of social and environmental crises. The normative views of sustainability featured less in these discussions because actors preferred to translate sustainability by focusing on business accounting practices and reporting. The business responsibility agenda or ESG focus appeared to be more influential for change in business operations.

Likewise, the themes in section 7.3 demonstrated the determinants in the push-pull process of sustainability integration. The motivation for sustainability integration in PAE relies heavily on

legitimised imperatives from investors' demand, international pressure, and regulatory changes more than the concern for the local stakeholders. Change towards sustainability attempts to conform to the global worldview of acceptable business practices to attract investments, expand industries, and achieve economic development. Still, the profession encounters various impediments to sustainability integration in PAE, including lack of sustainability expertise, stakeholders' readiness and acceptance, political will and cost of teaching and learning about sustainability. Furthermore, the paucity of sustainability practices shows that sustainability is relatively low in organisational and accountant's priorities. The profession needs to address these difficulties for sustainability to be fully realised in PAE.

While the factors influencing sustainability integration are compelling, interviewees provided some insights in section 7.4 about how actors channel sustainability in PAE. Although change is triggered by the activities of foreign forces and agents, implementing transformation is often determined and shaped by indigenous actors and initiatives. Professional bodies have a firm grasp of education through interactions with various educational partners (tertiary institutions and tuition providers) and consultations with employers. As expected, the State remains the most potent actor with absolute right over the jurisdiction of accountants even though the profession is entrusted to act over its professional affairs.

The Nigerian accounting profession draws on international benchmarks from IFAC and UK PABs to seek validation from critical observers such as the State. One peculiarity in this discussion of influential actors is that UK PABs have significant privileged status, based, at least in part, on colonial pasts. They play a role in the current PAE structure as premium qualification alternatives for aspiring accountants, partnering with Nigerian PABs, and collaborating with wider stakeholders of the accounting profession. Instituting sustainability in

Nigerian PAE, therefore, is likely to be influenced by the interplay of national and foreign actors with various competing and sometimes conflicting interests.

In ascertaining the pathways of change, the findings in section 7.5 offer three avenues for sustainability to become established in PAE. PABs are at the forefront of advocating that regulators and practitioners engage in their sustainability initiatives, including some ESG content in PAE, and deploying resources to gain control of the sustainability space. From another viewpoint, the change process also involves jurisdictional disputes between the accounting profession and emerging sustainability practitioners. Since sustainability is emerging in a fragmented professional field, the channels of change will be more disorderly and may require political interventions through regulators. Amongst interviewees, regulation instituted by the State and influenced by international organisations is the most effective channel to enforce the integration of sustainability into PAE. Sustainability will materialise in Nigerian PAE once it becomes an established or standardised global model and framework, locally accepted through regulation. Sustainability education for professional accountants in Nigeria may then transform mindset, values, roles, and responsibilities.

Overall, the themes highlighted in this chapter indicate the diffusion of norms, adaptation of professional groups, and the emergence of localised pathways that transform PAE into the sustainability paradigm. Offering sustainability in its training programme serves instrumental purposes for the accounting profession to establish itself in this field. In the next chapter, the discussion consolidates the thematic analysis from the previous chapters (6 and 7) and relates it to the theoretical framework and literature review to evaluate the findings on the pathways and dynamics of integrating sustainability into PAE. Some of the discussion combines themes from both chapters while other parts address the unique findings from each case.

CHAPTER 8: PATHWAYS AND DYNAMICS OF INTEGRATING SUSTAINABILITY INTO PAE

8.0 Introduction

The empirical findings from the previous two chapters (Chapters 6 and 7) are consolidated in this chapter to discuss the pathways and dynamics of integrating sustainability into PAE. While the empirical chapters separately presented the UK and Nigerian case interviews, this chapter takes a cohesive approach that discusses the contrasts and parallels of the two cases to answer the research questions and provide insights into how PAE can incorporate notions of sustainability. Despite the differences in institutional conditions and system infrastructure between the cases, the findings reveal that the professional accounting field has become increasingly universalised, enabling greater diffusion of practices and norms from one setting to another. Consequently, these cases are not discussed as comparatives; instead, they demonstrate constructive system paths and distinct institutional perspectives to enable meaningful theoretical explanations and analytical generalisations.

The discussion in this chapter is informed by a theoretical framework founded in Institutional theory and CAS theory as presented in Chapter 3 and supported by a relevant body of literature discussed in Chapter 2 to address the following research questions:

RQ1: How is the accounting profession evolving to integrate sustainability into PAE?

RQ2: How do structural aspects of the accounting profession influence the integration of sustainability into PAE?

RQ3: How do actors influence the integration of sustainability into PAE?

RQ4: How is sustainability integrated into the framework of PAE?

As discussed in Chapter 3, Institutional and CAS theories shape understandings of different dimensions of the PAE change process; and synthesising their conceptual tools into an intermediating theoretical framework emphasises the effect of time, scale, and context. Therefore, three conceptual tools (bridging, elaborative and disparate concepts) were formulated to operationalise the theoretical framework and are applied in the sections of this chapter to address the research questions outlined above. Table 8.16 illustrates the links between chapter sections, theoretical concepts, and research questions:

Table 8.16: Linking theoretical concepts, research questions, and discussion chapter sections.

Chapter sections	Theoretical concepts	Research Questions
Section 8.1: Development of Sustainability in PAE	Bridging concepts - IT and CAS	RQ1
Section 8.2: Structural Pathways for Integrating Sustainability into PAE	Elaborative concepts - CAS	RQ2
Section 8.3: UK Institutional Dynamics	Disparate concepts - IT	RQ2 & RQ3
Section 8.4: Nigerian Institutional Dynamics	Disparate concepts - IT	RQ2 & RQ3
Section 8.5: Embedding Sustainability in PAE	-	RQ4
Section 8.6: Implications of findings	⟷	RQ1- RQ4

As shown in Table 8.16 above, the first part of the chapter, section 8.1, focuses on the development of sustainability in PAE, applying bridging concepts to answer RQ1. It centres on how exogenous and endogenous drivers in institutional theory likened to external triggers and internal fitness mechanism in a CAS explain how the accounting profession is evolving to integrate sustainability into PAE. In addressing RQ2, each theory is used to explain various layers of structure using elaborative concepts. Thus, section 8.2 on structural pathways of change demonstrates the use of CAS theory to elaborate aspects of change patterns such as

feedback loops, pace and non-linearity of change recognised in institutional theory but rarely investigated. CAS theory addresses the higher order of interactions in the structure of professional accounting domains that have macro consequences for restructuring PAE to inculcate sustainability.

Still on the matter of structure, institutional theory elaborates distinctive structural conditions within a context and location that enable or constrain change. The proposition of field structure in institutional theory is closely linked to how actors channel field changes, which makes institutional theory more appropriate for resolving RQ3 because of its conception of agency and power relations that is not equally elaborated in CAS theory. Institutional theory advances the analysis of agency using distinct (disparate) concepts of actors' interests, power, and institutional work. The institutional analysis of structural aspects and the role of actors are considered in section 8.3 for the UK profession and section 8.4 for the Nigerian profession.

The fourth research question RQ4 has a more practical focus on how sustainability is embedded in the framework of PAE which is discussed in section 8.5. Rather than relying on theory, this final research question is addressed through the literature on education for sustainability and sustainability in accounting education. The concluding parts of this chapter resolve the research questions by considering the implication of the findings in section 8.6, followed by a chapter summary in section 8.7.

8.1 The Development of Sustainability in PAE

The extensive literature on the formation of the accounting profession established that professionalisation was made possible by exogenous factors that provided an opportunity for occupational elevation, alongside motives and strategies utilised by accounting professionals to attain this elevated status (Robson and Cooper, 1990; West, 2003; Walker, 2004; Birkett and Evans, 2005; Richardson, 2017). The findings from the empirical chapters corroborate that the

profession evolves through the interplay of exogenous pressures (external triggers) and endogenous factors (internal motives), allowing it to embrace sustainability concerns within its education change process. Reinforcing the notion that the pressure to change is driven by global factors outside the profession, a Nigerian interviewee remarked: "*the pressure has been more of external than internal"* (P25, HYB). Sustainability is not an issue solely to be addressed in accounting education; rather, it introduces a new era for the profession as it seeks to redefine and reposition itself within societal and business agendas (Spencer, 2020; Unerman, 2021).

Lee's (1990) historical analysis of accounting further indicates that process of reinvention accommodates environmental changes and paradigm shifts which shape the body of knowledge underpinning accounting. Accounting education and formalised knowledge are crucial determinants of the profession's status and how it might change in the future (West, 2003; Lee, 2013). As such, a crucial objective of the thesis was to understand how the accounting profession conceptualises sustainability because it determines which sustainability 'variant' is envisioned for the education and training of professional accountants. This section explores the antecedents and expectations of how the profession is evolving to incorporate sustainability into PAE.

8.1.1 Exogenous Pressures and Endogenous Factors

Abbott's (2005) evaluation of professional systems suggests that external and internal forces combine to expand or contract the boundaries of professional work, with professionals acting proactively and reactively towards new opportunities to reinforce or discard their earlier jurisdictions. As one UK interviewee expressed, *"there has been a fundamental rethinking and repositioning of accountancy for the 21st century"* (P08, PAB). Likewise, the empirical findings summarised in Table 8.17 show that exogenous pressures and endogenous factors

interact to foster the evolution of the accounting profession in integrating sustainability into PAE.

Table 8.17: Factors driving the accounting profession to integrate sustainability into PAE.

	Exogenous Pressures	**Endogenous Factors**	
PAE	• Disruptions in the environment (technology and sustainability) • Internationalisation of accounting labour and knowledge	• Maintaining relevance • Future legitimacy of accounting and accountants	UK
	• Disruptive trend in accounting knowledge (technology) • Internationalisation of accounting regulation and labour markets	• Fear of being irrelevant • Adapting for survival	Nigeria
Sustainability integration	• Socio-economic mainstreaming • The business case	• The public interest	UK
	• Investor preference • International pressure and emerging regulatory mandates	• To be relevant • Need for survival	Nigeria

Source: extracted thematic summary from UK and Nigerian empirical chapters – Ch 6.1 and Ch 7.1 & 7.3)

Responses from the UK and Nigerian interviews established that exogenous pressures deemed disruptions and broader internationalisation trends in business and accounting drive PAE reforms and the profession's interest in addressing sustainability. It has become an imperative that the profession *"must be able to understand disruption however disruption is going to come"* (P01, HYB), with technology and sustainability being exemplars. Furthermore, these disruptions are framed as threats and opportunity to the accounting profession. According to the statement from a Nigerian interviewee: *"millions of jobs will be lost as a result of technological disruption that affects the accounting profession and new evolving jobs that were not there before which this technology will bring about"* (P02, HYB). Both statements

emanating from long term members of the profession with strong links to academia and professional interest institutions is reflective of how the profession reacts to perceived opportunities or threats as the surrounding socio-economic systems also changes.

In contrast, internationalisation is framed as an opportunity rather than a threat enabling the profession to build a cross-border accounting labour market, harmonise accounting knowledge into Anglo-American norms, and maintain resilience towards future challenges with the emergence of multinational accounting firms and transnational professional associations (Faulconbridge and Muzio, 2012; Boussebaa, 2015; Richardson, 2017; Hopper, Lassou and Soobaroyen, 2017). One common example of the effect of internationalisation on PAE provided by the UK and Nigerian interviewees are 'cross-border qualification agreements' which they commend as generally beneficial to the global accounting profession. However, concerns on internationalisation appear dominant in the Nigerian profession. As one interviewee stated; *"International employment matters because the world is now a global village"* (P27, ACD), with several other responses echoing such views that conformity to global trends and expectations in accounting knowledge, regulation, and practice are the reasons for PAE reforms and the inclusion of sustainability. Critiques on the role of accounting as an instrument of globalisation used in propagating neo-liberalism is that it has weightier consequences for developing countries (Hopper, Lassou and Soobaroyen, 2017).

Disruptions and internationalisation trends are not peculiar to the accounting profession but originate within the wider society to alter the status quo of professional expertise, causing professions to evolve (Scott, 2008; Muzio, Aulakh and Kirkpatrick, 2019). CAS theory uses 'the edge of chaos or crisis' to denote disruptive occurrences that can cause actors to re-examine current practices and models, leading to co-evolution within a system (Chiva-Gómez, 2003; Chaffee and McNeill, 2007; Folke, 2019). Likewise, institutional studies have described

exogenous triggers as 'field-configuring events' such as social, technological, and regulatory changes and political crises that destabilise the field, allowing it to evolve beyond current models (Greenwood and Hinings, 1996; Barley and Tolbert, 1997; Greenwood, Suddaby and Hinings, 2002; Wooten and Hoffman, 2008; Zietsma *et al.*, 2017).

The UK profession's interest in sustainability evolved alongside its emphasis in wider socio-political discourse and importance to business entities; as in these statements from interviewees: *"sustainability has become much more mainstream"* (P18, HYB), and "*there's an absolute business imperative to understanding Sustainability"* (P03, PAB). These external pressures to integrate sustainability bears semblance to isomorphic pressures described in institutional theory whereby organisations are shaped by coercive, normative, and mimetic forces in the environment (DiMaggio and Powell, 1983; Leicht and Fennell, 2008). Some evidence of these pressures is revealed in recent developments in the accounting standard-setting domain (Abela, 2022; Adams and Abhayawansa, 2022; Rowbottom, 2022). Formerly, sustainability was regarded as a broader societal issue rather than an accounting issue, implying that the profession was not pressed to address social and environmental problems unless explicitly linked to accounting. Mounting pressure on the profession to attend to sustainability, and its external dependencies on business and society, transformed some of the *"institutional inertia'* (P03, PAB) about sustainability within accounting to it being a priority. Hence, the accounting profession is co-evolving with changes in business and society enabling PAE reforms.

While the accounting profession is triggered by external pressure to evolve, internal considerations also exist as to how the profession decides to restructure PAE and address sustainability. Interviewees in both cases used resonating languages to describe drivers of change from an internal perspective, through words like 'relevance and survival' to indicate the motive of the profession, and words such as 'reimagining, rethinking, and repositioning' to

indicate action on the part of the profession. Yet, endogenous considerations that were highlighted in the Nigerian case are nuanced because they are experienced in the local conditions and through expectations from foreign institutions. Endogenous factors in a CAS are defined by its ability to achieve 'fitness' with the environment (Chaffee and McNeill, 2007; Preiser *et al.*, 2018), deal with diverse interactions, and anticipate future prompts to ensure survival by evolving from experience (Dooley, 1997; Eidelson, 1997). Therefore, PAE reforms to incorporate sustainability are about *"preparing future ready accountants"* (P02, HYB), which is in the system's survival interest and aligned with the profession's goal of pursuing relevance and future legitimacy.

Endogenous factors also contribute to field-level changes established in institutional studies (Greenwood and Hinings, 1996; Wooten and Hoffman, 2008; Micelotta, Lounsbury and Greenwood, 2017). Endogenous factors are determined by the strategic intentionality of actors based on field conditions (Campbell, 2009). PAE reforms and integration of sustainability are rationalised internally with the mindset that failure to adapt to external pressures would result in loss of relevance and decrease the chances of survival for professional accountants in the present and the future. As P32 (REG) from Nigeria puts it, "a*ccountants will always have to be relevant'.* The most significant way the profession adapts is by expanding or contracting its knowledge frames (Lee, 2013). Concerns for relevance, survival, and legitimacy are rooted in the profession's self-interest, and West (2003) argues that the profession's desire for change can be viewed as an instrument to pursue enhanced status. The profession's self-interest is a major cause for debate in the professionalisation literature as it arguably contradicts the commitment to act in the public interest (Sikka, Willmott and Lowe, 1989; Lee, 1995).

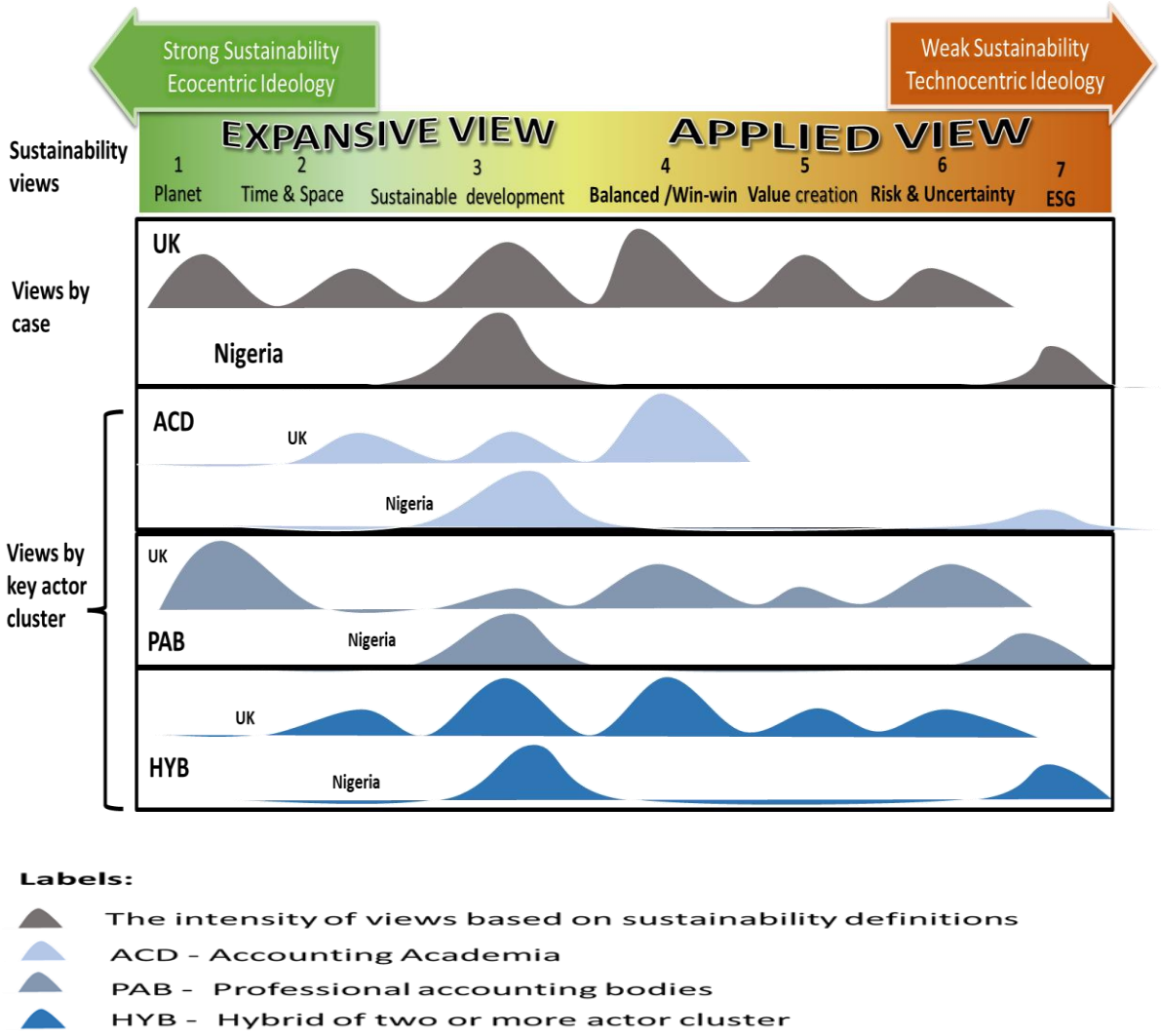
While some identified the public interest as a reason for the profession to incorporate sustainability into PAE, it was seldom mentioned and even missing from the discussions within

the Nigerian case. Yet, several authors have maintained that acting on sustainability and embedding it into PAE is crucial to the profession's public interest obligation (Gray and Bebbington, 2000; Gray and Collison, 2002; Collison, Ferguson and Stevenson, 2014; Nickell and Roberts, 2014). The public interest argument creates convictions on the part of the profession, appearing in several declarations about why accountants need to understand and address sustainability. In contrast, the interview findings have shown that it is not the utmost priority. Instead, the development of sustainability in PAE transpired from disruptive trends that drew the attention of the profession in its pursuance of legitimacy and relevance. It could be argued that the accounting profession spotted an opportunity for reinvention such that accounting can be fit to withstand social pressures and expectations and adjust its knowledge base to meet rapidly emerging needs for sustainability expertise.

8.1.2 Conceptualising Sustainability in the Accounting Profession

Evaluating the conceptualisation of sustainability in the accounting profession is important in PAE for two reasons. First, it reveals the profession's stance on sustainability and the extent to which such issues are recognised within accounting; second, it underlies the type of education accountants will receive on the subject (Gray and Collison, 2002). The findings about sustainability interpretations in the UK and Nigeria comprised diverse views from various actors. Figure 8.18 below represents these definitions of sustainability on a continuum from an expansive to an applied focus; it also depicts the variations between the cases and among key actors within each case, and the height of the curves denotes the frequency of each view amongst interviewees.

Figure 8.18: Illustrating the conceptualisation of sustainability on a continuum



Source: author's depiction from UK and Nigeria empirical findings- Ch 6.2 and Ch 7.2

The UK professional field shows a dispersed interpretation of sustainability; which includes (1) protecting life on the planet, (2) social equity between current and future generations, (4) balancing environmental, social, and economic goals, (5) creating value within planetary boundaries, and (6) risk implications of sustainability for business. Elsewhere, the Nigerian perspective depicts two viewpoints; (3) sustainable development and (7) environmental, social and governance reporting. These views were sometimes concurrently used to define sustainability as highlighted in the views of a Nigerian interviewee: "*Sustainability has been*

defined as managing the needs of the present without compromising the ability of future generations to meet their own needs […] people say it is PPP, people, profit and the planet" (P32, REG).

The expansive view (1-3) embraces issues and perspectives considered external to accounting, such as concerns for planetary boundaries, socio-ecological responsibility, and social equity between human generations and species. One UK interviewee that offered such perspective of sustainability stated: *"Sustainability is about how we trace our way through the world be that as an individual or corporate entity. Having deference or respect for the environment within which we interact and being responsible for our interactions with said same environment."* (P08, PAB). Expansive views can be linked with strong sustainability prioritisation and ecocentric ideologies that unsettles the underlying assumptions and practices favouring radical socio-ecologically informed action for a sustainable future (Maunders and Burritt, 1991; Gray, 1992; Hopwood, Mellor and O'Brien, 2005; Gray, 2010). Yet, extreme environmental/planet-based views on the expansive end can have difficulties in practical application and limitations to accommodate the complete scope of sustainability.

Comparatively, the 'applied focus' is readily accepted into the accounting knowledge frames because it blends elements of sustainability into accounting resulting in hybrid languages and techniques that can assist business leaders in acting towards sustainability (Schaltegger and Burritt, 2010). The applied spectrum adopt sustainability definitions based on the pragmatism driving business and accounting actions towards sustainability as expressed by a UK interviewee; *"we define sustainable business rather than sustainability"* (P16, PII). Some of these applied definitions have been criticised for lacking ecological literacy, equating corporate sustainability with 'sustainability', and prioritising economic gains as the ultimate goal (Gray, 2010; Milne and Gray, 2013; Tregidga, Kearins and Milne, 2013). Weak sustainability

prioritisations and technocentric ideologies intensify as the views move along the applied spectrum (see Figure 8.17). Such conception upholds the existing accounting and business systems with some adjustments for social and environmental concerns and overdependency on innovative technologies to address critical sustainability issues (Bebbington, 2001; Hopwood, Mellor and O'Brien, 2005; Byrch *et al.*, 2007; Gray, 2010; Lankoski, 2016).

Agreeing on a universal meaning of sustainability is problematic due to incompatible values and ideologies (Bebbington, 2001; Bebbington and Larrinaga, 2014). Thus, SD[31] became a unifying reference among actors in UK and Nigeria regardless of their position on the continuum of views; as one Nigerian interviewee pointed out, *"sustainability issue is everywhere today, even in the Sustainable Development Goals"* (P29, ACD). SD is salient in today's discourse as it became institutionalised following the 1987 Brundtland Report leading up to the global adoption of the SDGs in 2015 (United Nations, 2015). SD, being a standard description for sustainability, shows the global resonance of the issues and validates it as an open signifier (Bebbington and Larrinaga, 2014). The plurality and malleability of SD are beneficial because it cuts across disciplines, locations, and scales engaging all societal hierarchies (Byrch *et al.*, 2007; Byrch *et al.*, 2015); on the other hand, the openness of SD could signify that it fits the dominant modernist worldview without question, limiting any systemic change (Gray, 2010).

Contestations in sustainability interpretations are rooted in history, politics, ethics, and philosophies, which have become less detectable as these issues become mainstream (Bebbington, 2001; Huckle, 2016). Moreover, accounting permits co-existing contradictory views of sustainability that appear less contentious on the surface, given that it is deeply

[31] SD has been defined as Sustainable Development in previous chapters.

embedded in modernity (Gray *et al.,* 2001). The profession seeks a convergent understanding and harmonised approach to sustainability, but the underlying principles matter as much as the definitions when making a case for sustainability in PAE. The principles of 'responsibility/accountability' becomes the stronger rationale for some, while the 'business threat/opportunity' principle is fundamental for others (Baker, Gray and Schaltegger, 2023). Value judgments would determine if an accommodatory, transformative, or reformist approach[32] is applied to integrating sustainability into PAE (Hopwood, Mellor and O'Brien, 2005; Sterling and Huckle, 2016).

Applied sustainability interpretations are already included in the current PAE offerings (See Owen, 2013; Boulianne et al., 2018), demonstrating an accommodatory approach that makes room for sustainability knowledge in PAE but ignores a deeper exploration into the ideologies underpinning accounting knowledge (Sikka *et al.*, 2007; Ferguson *et al.*, 2011; Gray, 2013; Boyce *et al.*, 2019). Recombining elements of sustainability with accounting resembles an evolutionary path of change because it permits the retention of core elements known to accountants. Another way of pursuing an evolutionary path is through a reformist strategy, which considers the consequences of socio-ecological understandings for accounting knowledge and perhaps deliberates on the complexity and uncertainties of teaching sustainability to accountants from diverse backgrounds. Taking an expansive view means that PAE would need to be transformed in line with renewed socio-ecological notions following a revolutionary change pathway; however, there are concerns in the accounting profession that this runs the risk of creating an accounting that appears abstract to practitioners.

[32] The three approaches to change were previously discussed in section 2.3.1 of the thesis based on the work of Hopwood, Mellor ,and O'brien (2005); and the difference between each approach is the type of reform advocated based on worldviews.

The problem facing the accounting profession as it institutes sustainability into PAE would be deciding the extent of reform needed; how much of the old system should remain, and to what extent can modifications be introduced amidst other constraints. The next section seeks to address how structural aspects imparts the profession's pathways to change.

8.2 Structural Pathways for Integrating Sustainability into PAE

The preceding chapters[33] of this thesis mapped the structure of PAE using CAS theory and offered propositions about leverage points within this structure for embedding sustainability in PAE. Empirical work undertaken for the UK and Nigeria cases allowed deeper exploration of these propositions, and the presence and nature of feedback loops between education, research, practice, and regulation. The UK professional system has a long-established structure which made it viable for deducing the functional interactions among accounting domains and identifying the leverage points compared to the Nigerian system. The system capabilities in the Nigerian accounting profession are constrained due to the socio-political context, which limits the identification of possible leverage points within its structure. Explanations of structural pathways of change in this section focused on the sub-system interactions in the UK accounting profession, followed by the system leverage points within both professional settings.

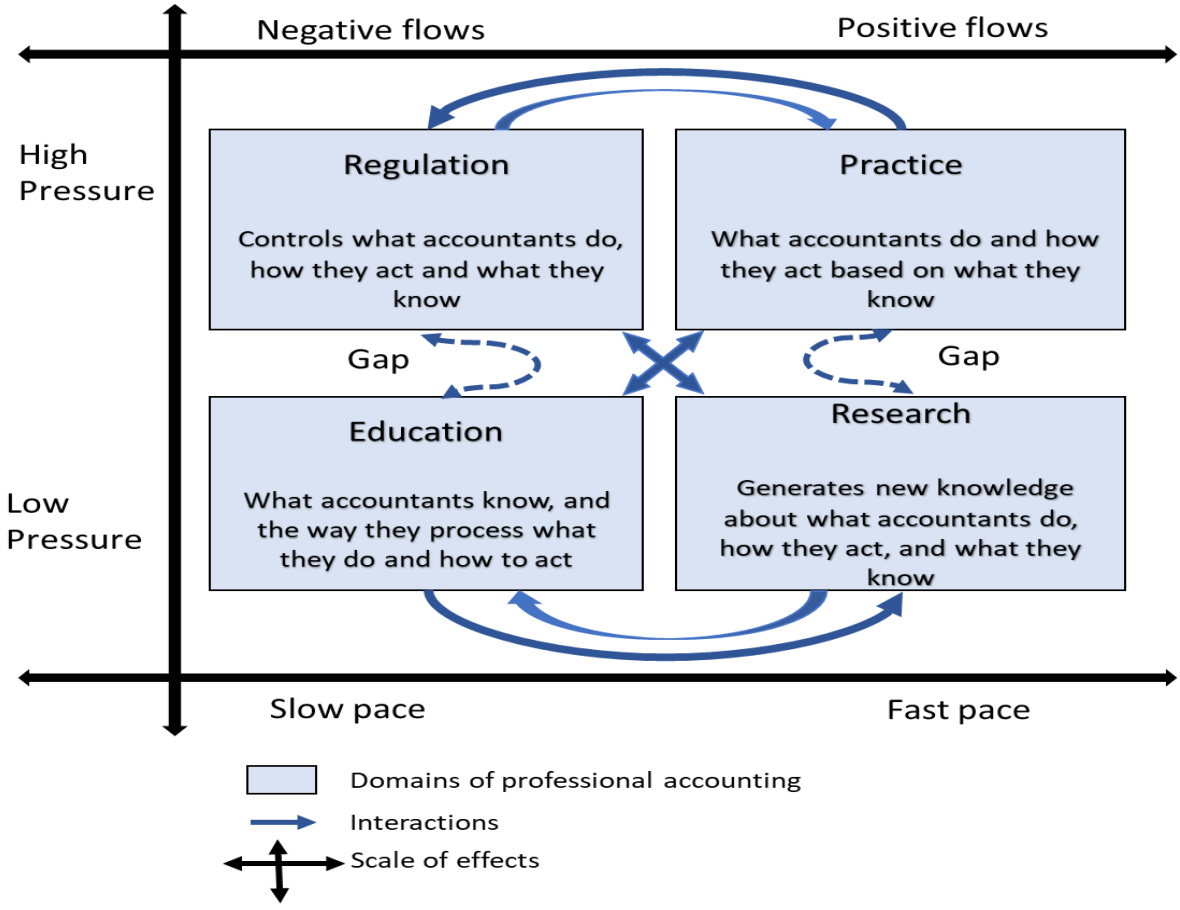
8.2.1 Patterns of feedback loops

Prior studies of feedback process in the domains of accounting discussed two-way interactions, for instance, between research and practice (Singleton-Green, 2010; Guthrie and Parker, 2016), or three-way interconnections either between education, research and practice (Lee, 1989; Duff, Hancock, Marriott, 2020) or research, practice and policy (Laughlin, 2011). This thesis builds on prior work on the system of professional accounting to define a four-way feedback process

[33] See chapter 3 for a discussion of CAS perspective on PAE and chapter 5 for a mapping of PAE using CAS theory.

between accounting education, practice, research, and regulation as the four sub-systems facilitating the functioning of the profession. Rather than bridging gaps between domains and reducing evident lags or delays, the essence of the CAS approach is assessing how feedback loops are useful in recognising change patterns and intervention possibilities (Dooley, 1997; Chiva-Gómez, 2003). The UK case findings elaborate the functions of feedback loops in the four accounting domains, as shown in Figure 8.19 below, as they interact through negative and positive feedback, lags and delays, and pressure and pace signals.

Figure 8.19: Illustrating the feedback loops in accounting sub-systems



Source: author's depiction from UK empirical findings in Ch 6.3

As shown in Figure 8.19 above, research and practice offer positive feedback loops to the system, while the slower functioning of education and regulation activates negative feedback

within the system. Positive feedback reinforces the system and serves as a source of growth, expansion, and even collapse, whereas a negative feedback loop signals the system to correct its actions with built-in lags activated after certain thresholds (Meadows, 1999; Clancy, Effken and Pesut, 2008; Preiser *et al.*, 2018). Lee (1989) argues that the closed loop between education and practice is how accounting achieves closure over its knowledge area and maintains partial system equilibrium. The research domain is slightly outside this primary loop but engages with the system as a source of knowledge and innovation that can cause potential system disequilibrium when it takes effect (Lee, 1989). Academics often advocate bridging the gap between various domains, especially the adoption of research which can potentially improve the other domains (Laughlin, 2011), which would be challenging to achieve since each domain operates at a different pace and pressure.

Pace describes the momentum of change (Micelotta et al., 2017; Zietsma et al., 2017), while pressure characterises the intensity of change drivers within the system. Conceptions of pace and pressure relate to Folke's (2019) proposition about the importance of time and space in CAS changes. It takes time for transformation to manifest across different system interaction levels, and space is the conditional impact of such transformation, including locations of chaos or crisis (Folke, 2019). One UK interviewee puts this into context in the statement: "*the pace of changes is picking up exponentially. [PABs] are a lot more responsive to kind of the pressures which the professionals are finding themselves"* (P15). The pressures that professionals are facing in terms of sustainability emanates from regulations and practice domains. Regulation and education reflect a slower pace because it requires specific measures to come into effect, but practice and research can be progressive and radical, thus moving more quickly. As one explained on how sustainability has developed in the accounting profession; "*the development goes slowly, eventually you come to a tipping point"* (P12, HYB). While

sustainability accounting first expanded through research and practice, it took considerably longer for regulation and education on the subject to result in visible changes (Bebbington, Larrinaga and Thomson, 2021).

Findings from the UK empirics in chapter 6.3 reflect the coupling of these domains (regulation & practice and research & education), balancing each other through their respective negative and positive feedback functions. Therefore, education and regulation provide the most valuable paths to stabilise the accounting system, but research and practice are more significant to create innovations. The empirical insights indicate that change can occur quickly and slowly and with high and low intensity based on the interaction and feedback loops among the domains. Consequently, the patterns of change for sustainability integration are nonlinear and 'multidirectional' as incremental changes in other domains constrain or coerce a PAE change in unprecedented ways (Chiva-Gómez, 2003; Chaffee and McNeill, 2007; Palmberg, 2009; Preiser *et al.*, 2018). Multiple interacting parts are responsible for effects that are not traceable to a single locality nor aggregated from micro-level interactions. Coevolution is an expected outcome from the adjoining domains of the profession such that PAE would mirror events at the collective professional system level. Hence, the interplay of rapid and gradual system changes (fast and slow variables) produces emergence and evolutionary patterns (Folke, 2019).

8.2.2 Identifying System Leverage Points

History and context are reference points for CAS changes which reveal the path dependency for change (Holland, 1992; Chaffee and McNeill, 2007; Folke, 2019). UK and Nigeria differ in their professionalisation histories and contexts, which conditions their future change pathways and the identifiability of system leverage points. UK professionalisation developed from bookkeeping and bankruptcy practices, new regulatory opportunities, assemblages of accounting knowledge, and the institution of accounting as an academic discipline (Lee, 1995).

Meanwhile, the Nigerian accounting profession was founded under the pressure to achieve independence from British colonial rule and social and economic autonomy, leading to its professional structure and knowledge frames being derivatives of the UK model (Uche, 2002; 2010). Nonetheless, the findings from each case offer some leverage points moderated by feedback loops.

In both contexts, regulation is the leading feedback mechanism to which all other domains, including education, are compelled to respond and adapt. The Nigerian case reiterates the regulatory pathway where the introduction of corporate governance and ESG reporting regulations created an inflow of changes in practice and education domains. One interviewee elaborates on this pathway in the statement: "*If we regulate how to practice it, then that'll have the backward integration effect on how we teach it"* (P30, ACP). Moreover, broad-based mandatory sustainability regulation is emphasised as an essential structural change mechanism in the sustainability accounting literature (Baker, Gray and Schaltegger, 2023). Another leverage point occurs with feedback from accounting practice that causes modifications to accounting education so that professional accountants do not lose their value in the workplace. This point is evident in Owen's (2014) study of how the PABs incorporate the practice-focused principles of integrated reporting into their qualification.

Thirdly, research has considerable proximity to education and is transferred in academic settings (Duff and Marriott, 2017). Accounting research has generated innovations around the application of sustainability that can be translated into the practice, education, and regulatory domains to gain impact (Burritt and Tingey-Holyoak, 2011; Margerey, 2011; Gray, 2013). Even so, there is a delay or gap between research, regulation, and practice because they change at different paces and vary in orientation and focus. According to one of the UK interviewees speaking on the relationship between research and other domains: *"the combination of research*

and teaching is very important […] we haven't used much in practice from all the research that has been done, and it's a pity" (P12, HYB). Apart from regulation, the influences in other domains are rarely deployed and are slower in operation. The pattern of system changes in Nigerian PAE was not inexplicit about the operations feedback loops, demonstrating fewer complexities and capacity for non-linear change.

Irrespective of feedback functions, relational elements between different actors can also be leverage points. In a CAS, intracomponent linkages are usually stronger than intercomponent linkages (Eidelson, 1997), so nearby agents, as in the case of educators interacting with accounting, will develop stronger connections offering nodes of intervention. Thus, from another perspective, *"it's actually the education that is influencing the practice"* (P26, PTP). Likewise, the positioning of PABs in Nigeria as curators of activities connected across all domains (education, practice, research, and regulation) can allow the more rapid movement of resources and information among actors to transform the system's structure (Eidelson, 1997; Ford, 2008). Leverage points cannot be simply used to control a CAS but are avenues for interventions that can produce system transformation (Meadows, 1999; Polacek *et al.*, 2012). The next sections of the chapter provide further elaborates why leverage points are constructive and not universal across setting based on varied institutional conditions and capacity among a network of actors.

8.3 UK Institutional Dynamics in integrating Sustainability into PAE

The institutional perspective is applied in this section to address nuances of structure and agency under field conditions which the CAS theorisation could not adequately address. The UK accounting profession has the characteristics of a mature institutional field because of its extensive structure and identifiable practices and norms that binds actors (Hinings, Logue and Zietsma, 2017; Zietsma *et al.*, 2017). The structure of the UK professional field was previously

described in the context chapter[34], with the interview evidence buttressing the normative basis of the profession, interconnectedness amongst actors, and the operational networks in the provision of PAE. Sustainability did not suddenly emerge in the accounting profession and its education process but gained traction as the profession faced increasing pressure about its purpose and the relevance of its knowledge base. As one interviewee puts it; *"there's a real struggle for professionals to justify number one, why they should exist, and number two, what they should study to remain relevant"* (P01, HYB). The profession sees sustainability as both a threat to its long-established legitimacy and an opportunity to reinvent itself to meet public expectations of professional responsibility as well as renewing its expertise to serve corporate needs around accountability for social and environmental issues.

A compelling argument in the case findings is that integrating sustainability into PAE requires a degree of consensus and must be planned and implemented gradually to avoid fragmentation within the profession. Changes in PAE appear to follow an evolution pattern that is consistent with the literature that suggests that changes in professional fields are convergent and slow, but diffusion happens quickly (Greenwood, Suddaby and Hinings, 2002; Suddaby and Greenwood, 2005; Currie *et al.*, 2012; Hinings, Logue and Zietsma, 2017). PAE change requires repeated consultations with several stakeholders and often takes effect after change is agreed.

Actors in UK PAE perform distinct roles, but their diverse and sometimes conflicting interests can be overwhelming to incorporate into PAE changes. It was acknowledged in the interviewees that; *"there are lots of conflicting, not conflicting but various and diverse if you like demands on [the PAB] to provide education*" (P10, PAB). As such, the profession prioritises powerful actors by ensuring that it meets the needs of the market and regulatory requirements; the reasons

[34] See further discussions in chapter 5 of the thesis.

being that these powerful actors legitimate the activities of the profession and ensure their privileged status (Leicht and Fennell, 2008; Suddaby and Muzio, 2015). Furthermore, actors' capacities to facilitate the integration of sustainability into PAE is determined by their roles and interests and use of power and influence in the field. In the UK, there was a sense of distributed agency (Battilana, Leca and Boxenbaum, 2009), whereby multiple actors, regardless of role, can contribute to field changes (Wooten and Hoffman, 2008).

The field, therefore, accommodates rounds of negotiations amongst actors seeking to re-organise and adapt PAE in line with a new expectation and focus. Similarly, Gibassier, El Omari and Naccache (2020) assert that each actor has a different view of sustainability which plays into whether they support or resist impending changes. Therefore, there is a need to recognise the iterative nature of 'institutional work' carried out by various actors as they engage in field changes (see Lawrence and Suddaby, 2006). At the outset, actors resist sustainability as a consequence of institutionalisation seeking to maintain the status quo or perceived threats. The profession, having realised the need for change, realigns the field by engaging in creative work that preserves certain normative elements while expanding the boundaries of the discipline to introduce new knowledge, practices, and behaviours around sustainability.

The UK profession has taken the initiative and responsibility to be at the frontier of embedding sustainability into PAE as it already includes varying degrees of sustainability material with more changes to be implemented as regulation and practice increase and research expands in this area. Moreover, the actors are proactive through a web of interactions to take meaningful steps and lead the transition for sustainability in PAE. Still, the change required must occur at two levels; a profound change in institutional elements about the norms, identity, and values in accounting, which reinforces further functional changes in the accounting education process.

8.3.1 Roles and Interests of Actors

Examining the roles and interests of actors is vital to understanding who can channel the integration of sustainability into PAE and why (Burrage, Jarausch and Siegrist, 1990; Suddaby, Cooper and Greenwood, 2007; Zietsma *et al.*, 2017). Actors function in various roles across the PAE landscape, though some have a greater responsibility than others; while some can take up multiple functions concurrently, for example, PABs, accounting practitioners, and accounting academics. Based on the UK empirical findings, Table 8.18 below provides an overview of the various PAE actors and their roles and interests.

Table 8.18: Roles and interests of actors in UK PAE

	Actors	**Roles**	**Interests**
1.	Professional Accounting bodies	Gatekeepers of PAE responsible for defining education requirements, inducting members, and maintaining expected standards of expertise and behaviour	Maintaining legitimacy and increasing resilience
2.	Accounting firms and practitioners	Dual carriers of professional norms shaping PAE policies partnering with PABs through training contracts to provide education for recruits	Serving clients and organisation Exploiting market opportunities
3.	Employers	End users of professional accounting expertise partnering with PABs through training contracts to provide education for recruits	Creating value for themselves
4.	Students	Beneficiaries of accounting knowledge and skills	Seeking employability and career fulfilment
5.	Accounting academics	Educators of accounting undergraduates at pre-qualification level Translating knowledge	Advancing knowledge in the discipline and making a social impact

		Service suppliers for curriculum development and examinations procedures in PAE	
6.	Universities	Providers of pre-qualification education and partners in PAE through accreditations	Maintaining reputation and increasing student enrolment
7.	Professional tuition providers	Trainers for the accounting qualification ensuring that students pass the examinations	Achieving commercial success by obtaining higher ratings
8.	State (and its regulatory agencies)	Overseers of the accounting profession, including its education process	Ensuring public welfare
9.	Professional interest institutions (such as IFAC)	Sources of global education standards that influence the PAE system	Promoting and advocating for global professional interests

Source: extracted thematic summary from UK empirical analysis in Ch 6.4

The role of actors, as shown in Table 8.18, draws attention to the proximity of certain actors and their position in relation to others in the field, which coincides with discussions in institutional theory on the importance of networks formed around an activity (DiMaggio and Powell, 1983; Greenwood and Hinings, 1996; Greenwood and Suddaby, 2006; Suddaby, Cooper and Greenwood, 2007). There are several network exemplars in PAE, but an obvious one is the interconnection of universities, accounting academia, and accounting undergraduates in providing accounting degrees. Students that have gone through accounting degree programmes have been influenced by their universities and especially by the education approach of accounting academics (Thomson and Bebbington, 2004; Gray, 2013). Another network arises from the professional training which involves multiple actors which an interviewee from a UK PAB describes as "*a tripartite arrangement between [the PAB], the training provider, the company, and the student who needs to be in fulltime employment."* (P03, PAB).

Some other actors who are not directly involved in PAE are significant for their ability to directly or indirectly influence PABs as they administrate PAE. For instance, the State has an oversight role, and IFAC provides regulatory guidelines and sets the benchmark for PAE globally. Recognising networks around PAE based on the role of actors further validates the system map detailed in Chapter 5 of the thesis. Furthermore, actors whose interests align are more likely to work together to channel change (Suddaby and Viale, 2011; Micelotta and Washington, 2013). The UK's institutional structure contains a multitude of aligned interests, observable above in Table 8.18. PABs and IFAC are both working for the interest of the profession at different levels; firms serving the needs of clients are also employers wanting to create value for themselves, universities seeking higher reputation by being associated with the profession wanting to increase student enrolment and income, and students wanting to obtain professional qualifications to gain employment. Finally, PTPs want to ensure higher pass rates to achieve commercial success.

Nevertheless, in a field with diverse actors, there are bound to be misaligned interests (Seo and Creed, 2002). For instance, universities and PTPs are both educational institutions but have different goals for education provision, and practitioners and accounting academics who have a voice in PAE reforms often have contradictory views about PAE (Gray and Collison, 2002; Gaffikin, 2009; Boyce *et al.*, 2019). There are occasions when tensions arise in the field; dissenting views from accounting academics about the accreditation process that binds universities and PABs are evident because they believe it limits the potential for broad-based accounting education. One interviewee depicts this tensions on accreditations between academics and PABs: '*they say we impose our syllabuses on them and we constrain their abilities to educate on other stuff, we don't, we don't impose anything, if they want to get credit, then our regulator says you have to benchmark'* (P05, PAB). However, the relationship between

UK PABs and universities tied to accreditations and education partnerships has become even more widespread as it favours both parties since both are concerned about student intake to generate income. Tension also arises because practitioners and organisations focus more on commercial interests than public welfare, sometimes misaligned with the State and PABs who have a duty to the public interest. Although powerful actors are apparent, power is not absolute in the UK context, as mutual dependencies among a network of actors with distinct roles and interests fuel power and influence, which is further discussed in the next sub-section.

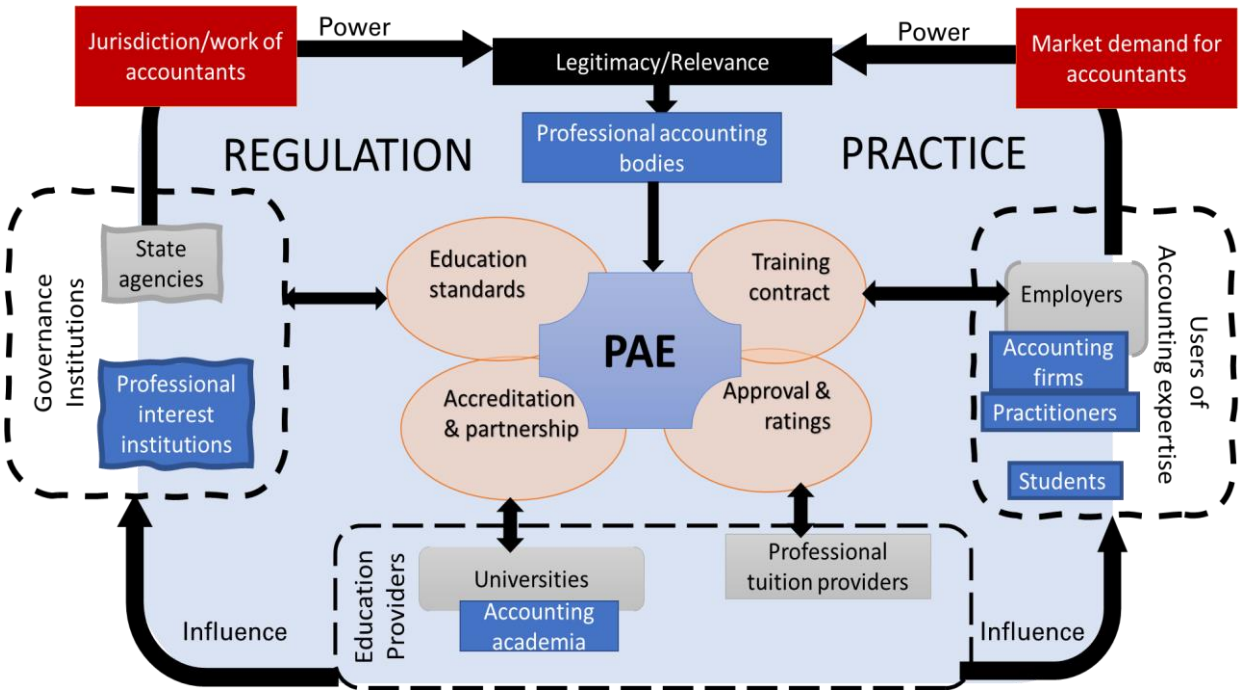
8.3.2 Distributed agency and power

Analysing agency is paramount to demonstrating which actors have the capacity to act and create influence through the domains of professional accounting. The earlier section 8.2 has alluded to the workings of feedback processes to reveal a non-linear change pathway, with the agency of actors reorganising the field to produce nonlinear and coevolutionary patterns (Micelotta, Lounsbury and Greenwood, 2017). The concept of distributed agency (Battilana, Leca and Boxenbaum, 2009), reminiscent of distributed control in CAS theory (Eidelson, 1997; Chaffee and McNeill, 2007), offers the key to understanding how change at the system level relates to the agency exercised by multiple actors with diverse roles and interests. Actors in the UK have a thorough awareness of their institutional dynamic, greater reflexivity about their motives, and a developed capacity for action. Distributive agency emphasises that agency is multidimensional to the extent that a host of actors can be accountable for the outcome of change (Battilana, Leca and Boxenbaum, 2009).

The case findings distinguish between bases for action; one is through power which compels another to act; the other is influence which persuades or convinces another to act in a desired manner (Lawrence, 2008). At the profession's inception, powerful others such as the State and the market facilitated the occupational ascendancy of accountants (Willmott, 1986; Carruthers,

1995; Birkett & Evans, 2005) and are still very much embedded in its development process as changes in accounting knowledge and PAE caters to their needs and expectations (Allison, 2007; Lee, 2013; Helliar, 2013). The role of power is evident from the interviews as in this statement; *"you need power and powerful people to push something like that sustainability"* (P19, HYB). Sustainability is more likely to become instituted in PAE in response to powerful actors, either to satisfy the requirements of regulators, particularly those who control the work of accountants or the expectations of employers who drive the market demand for accounting expertise because these pressures are deemed most legitimate by the accounting profession. Still, mutual dependencies between the accounting profession and these powerful stakeholders mean that PABs can also exercise considerable influence over accounting policies and practices, which later feeds into PAE changes. Figure 8.20 below illustrates how influence and power are deployed, including the various nexuses around PAE.

Figure 8.20: The pathways of change in UK PAE through actors' power and influence.



Source: author's depiction based on UK empirical findings in Ch 6.4

The capacity of other actors to institute change is demonstrated through influence because they do not possess the same level of resources as the powerful actors in PAE (Suddaby, Cooper and Greenwood, 2007). Educational institutions influence PAE because they have a defined role within the process, but academics, especially, have greater resources ranging from teaching accounting undergraduates to curriculum development and assessments for professional training, committee work for the profession, and research (Duff and Marriott, 2017; Duff, Hancock and Marriott, 2020). This is buttressed in the words of one interviewee, "*[Accounting academics] have some influence by people doing thought leadership, some of the research, some of the accounting education work that's done"* (P18, HYB). They not only directly influence the PAE process or PABs but can also form a coalition and influence powerful actors in the field to engage in institutional change. Lawrence (2008) argues that exerting influence is also a demonstration of power because it shapes the will of another towards an intended outcome.

The influence of educational institutions and accounting academics is often least acknowledged in PAE because PABs still control significant elements that define a competent professional accountant. Only a limited number of accounting academics have the opportunity to engage with the profession and are successful in changing their practices (Laughlin, 2011). It is important to also recognise that apart from actors power and influence are enabled via devices in UK PAE, such as accreditation, education benchmarks, training contracts, and rating schemes. Accreditation involves a mutual agreement between universities and PABs, ensuring alignment between degree programmes and professional qualifications (Aposotolou and Gammie, 2014). Despite the mutually beneficial nature of accreditation, there is a concern that PABs use it to exercise power over universities and their degree programme (Ellington and Williams, 2017).

Another device is the training contract between PABs, employers, training providers and aspiring accountants, but the nature of the arrangement gives power to employers and PABs. PABs are responsive to educational standards created by IFAC, demonstrating how this governance institution influences the education process (Helliar, 2013; Calhoun and Karreman, 2014). Unlike the other devices, approval and ratings have limited use since not all PABs outsource their teaching element to PTPs; however, they can still be used to influence the expected education delivery standard for tuition providers. These devices simultaneously condition possibilities that sustainability knowledge, skills and competencies will emerge in PAE. Power relations become even more critical as PABs deal with different demands and interests among key stakeholders while attempting to embed sustainability into PAE. Therefore, the process is not just about the strategic actions of PABs but about the actors who support or resist the change process, which is examined through institutional work in the following discussion.

8.3.3 Institutional work through resistance and re-alignment

The findings highlighted that the current institutional elements of accounting are incompatible with sustainability, resulting in initial resistance. These results are consistent with other studies that have shown how professional groups react to innovations and change through resistance and re-configurations (Greenwood, Suddaby and Hinings, 2002; Suddaby and Greenwood, 2005). In the field of PAE, "*the conditions for changing are equally as important as the changes themselves. […] unless you can bring people along in the journey, you're going to meet resistance. And what happens is you end up with splintering and fracturing"* (P08, PAB). Resistance is associated with maintenance of a field as a form of institutional work to uphold legitimacy and ensure the survival of existing elements and signals the need for institutional re-configurations that are negotiated among actors (Covaleski, Dirsmith and Rittenberg, 2003;

Micelotta and Washington, 2013). Correspondingly, creative work can be deployed to neutralise resistance, resolve institutional incompatibilities, and reconfigure institutional elements (Gibassier, El Omari and Naccache, 2020).

Lack of sustainability prioritisation on the part of the profession is a form of resistance since it perceived that sustainability had no direct impact on its legitimacy or immediate dependencies. Seo and Creed's (2002) conception of institutional incompatibilities suggest that misaligned interest affects the strategic response of actors. One interviewee recognised a misalignment of interest in that; *"the whole sustainability agenda, whilst it's incredibly important from a societal point of view, would be a bit down the pecking order"* (P18, HYB). Technology was a clear priority for accountants because it impacts the dependency on accounting expertise; the same justification could not be made for sustainability initially, making it appear less important. Another source of resistance emanated from the concern that sustainability lacks relevance to accounting practice, usually perpetuated by professionals in smaller organisations and firms who cannot relate their daily accounting practice to the ideas of the sustainability agenda. Accountants also struggled between their personal and professional identities; while they understood that sustainability is socially essential for the future of the planet and humanity, they could not connect that to the economic orientation and financialisation in the accounting function. To some, *"[sustainability] can be very abstract"* (P08, PAB), making translating it into accounting knowledge frames impracticable in their view.

These forms of resistance convey institutional contradictions that impede any meaningful educational transformation to address sustainability. Prior studies have shown a variety of responses by accountants signalling disinterest, resistance, and partial involvement in sustainability activities within organisations (Zvezdov, Schaltegger and Bennett, 2010; Egan and Tweedie, 2018). Gibassier, El Omari and Naccache (2020) identify resistance as

counterwork encompassing any action that stalls change which can involve sabotage or absence of work. In the case of PAE, resistance from more powerful actors has the greatest impact on the process of integration but most actors can exhibit varying forms of resistance. The profession exhibits resistance by not prioritising sustainability, professionals resist by questioning sustainability within their roles, and educators may believe that it is too abstract and complex to become teachable for accountants. Actors strategically re-organise underlying institutional elements through institutional work in response to exogenous pressures and constraints that hinder sustainability integration in PAE. The re-alignment of structures happens as actors tackle the inconsistencies related to sustainability integration in PAE, as shown below in Table 8.19.

Table 8.19: Institutional work towards realignment to integrate sustainability into PAE.

Types of actions	**Institutional work**
Capitalising on the public interest	**Create- mimicry** Associating new practices with existing sets of taken-for-granted practices, technologies and rules in order to ease adoption
Reorienting mindset and values	**Create– changing normative associations** Re-making the connections between sets of practices and the moral and cultural foundations for those practices
Differentiation of role and identity	**Create- constructing identities** Defining the relationship between professional accountants and the field in which they operate
Venturing into new frontiers	**Create- boundary work** Extending the boundaries of the professional jurisdiction
Affirming emerging sustainability concepts	**Create- defining and theorising**

	The development and specification of abstract categories and the elaboration of chains of cause and effect

Source: extracted thematic summary from UK empirical analysis in Ch 6.5

The profession capitalises on the public interest to convince its members that it has a role in the sustainability agenda. Professionalisation literature asserts that the public interest is utilised as a logic used to gain professional ascendancy that justifies the existence of professionals and the altruistic use of their expertise (Robson and Cooper, 1990; Lee, 1995; Birkett and Evans, 2005). It is especially common amongst academic accountants to *"argue under the public interest obligations that [the profession] has a very strong compulsion"* (P13, ACD) to address sustainability. The public interest mandate within accounting has always been controversial since its meaning and definition is recursive towards serving the profession more than society making it redundant (Sikka, Willmott and Lowe, 1989; Willmott, 1990; West, 2003). Yet, sustainability offers a re-evaluation of the public interest that is best defined in notions of the common interests to deliver the common good for nature and society (Spencer, 2020), which can now be used to evaluate the profession's contributions and value to society.

Adding to the public interest rhetoric, accountants express the right to assert their role within sustainability and exhibit a compatible identity as '*trusted business advisers'* (P16, PII), differentiating themselves from *'environmental evangelists*' (P03, PAB). This approach not only affirms the argument that accountants have a clear role in sustainability concerns (Schaltegger and Zvezdov, 2015; Ascani, Ciccola and Chiucchi, 2021), but that they must distinguish their role from other professionals in the sustainability space, especially from those with stronger environmental expertise (Clarke and O'Neill, 2005; Usmani, Davison and Napier, 2020; Channuntapipat, Samsonova-Taddei and Turley, 2020). Thus, accountants are trained to

believe that their role in sustainability within organisations is to ensure business resilience through sustainable strategies and value creation for stakeholders (IFAC, 2015).

Alongside identity reconstruction, the mindset and values about accounting are also being replaced to usher in new norms, such as business is not about profits but value (Gray, 2006; Adams, 2020), and accounting is not only about precise or accurate answers but must include scenario planning and qualitative considerations (O'Dwyer and Unerman, 2020). In justifying the need for a mindset shift, one interviewee conveyed: *"there still is a whole mindset out there that [sustainability] is just the nice thing on the side. It's not about the real money. And I think that light bulb moment when people actually get this is absolutely about creating value for the business, then that's when things start to change"* (P16, PII). Problematic ideals about money, conservatism, cost-cutting, and the need for accurate answers to make decisions are being re-examined because the complex and unstructured nature of sustainability are inconsistent with notions of financialisation in accounting (Hopwood, 2009). In this regard, professional bodies, educational institutions, and accounting firms are positioned to craft the identity, mindset, and values of accountants to better align with sustainability ideals.

Another form of work is building new language that allows accountants to articulate sustainability within the discipline. Concepts such as six capitals[35], shared value, climate risk, and business resilience are increasingly a part of the vocabulary that enables accountants to engage within the sustainability space[36]. It is relevant here to consider where these terminologies originate from; for instance, the capitals and value creation models emerged from the network of several actors, such as business representatives, accounting firms, regulators, standards setters, academics, and civil society to create an integrated reporting framework that

[35] Six capitals model was promoted by the International Integrated Reporting Council before it was integrated within the Value Reporting Foundation.
[36] See further discussion in section 8.1.2 of this chapter.

merges sustainability and economic outcomes (Milne and Gray, 2013; Rowbottom and Locke, 2016). Accountants are keen on expanding the focus of their expertise from businesses to society and the environment. According to one interviewee, *"traditionally [an accountant] has been internally focused on what the business is doing, now they're thinking holistically about what's the impact of that business on the society and the environment. And it's also how they're going to value the intangible aspects of biodiversity, key species, how do they impact on your business model, so it becomes wider than the pure financial focus"* (P17, PAB). Accounting technologies that assist accountants to account for and be accountable to society and nature are yet to be universally adopted, but this is expected to change with the IFRS Foundation's proposal on international sustainability standards in 2021 (Rowbottom, 2022). Re-organisation shows that the accounting profession intends to produce change across key institutional dimensions. However, it is not the sole responsibility and function of PABs to carry out such re-organisations because several other actors play role in the process, some more evident than others.

8.4 Nigerian Institutional Dynamics in Integrating Sustainability into PAE

The Nigerian accounting profession reflects a contested institutional field with distinct structures defined by the socio-political environment and professional contestations. There are local antecedents for sustainability shown through socio-ecological damage caused by multinational oil and gas companies and the lack of social responsibility for communities affected by the extractive activities of these companies (Disu and Gray, 1998; Hassan and Kouhy, 2015; Denedo, Thomson and Yonekura, 2019). Yet, the motivation for sustainability integration in practice and education stemmed from legitimised imperatives such as investors' demand, international pressure, and regulatory changes more than the concern for nature and indigenous stakeholders. Normative ideologies featured less in the field's articulation of

sustainability because, *"the motivation really is what has been happening to the environment, the fact that well, there's a global drive towards [sustainability]. And so, Nigeria cannot be left behind. And then even as part of corporate governance, sustainability is embedded"* (P32, REG).

Sustainability was nascent in the field and was inconsequential to PAE reforms until its inclusion in corporate governance codes and regulatory frameworks by institutions such as the Financial Reporting Council of Nigeria, Nigerian Securities and Exchange Commission (NSEC), Central Bank of Nigeria (CBN), and the National Insurance Commission (NAICOM). Despite the compelling reasons for integrating sustainability into PAE, the findings reveal some institutional impediments to its implementation. According to P25 (HYB), *"there is the challenge from points of political will, from the point of expertise, from the point of cost, from the point of stakeholders' readiness and acceptance".* Sustainability is not a primary political priority, and the regulatory efforts of State agencies focus voluntary frameworks which have increased awareness amongst certain institutions, but most organisations are not compliant (Erin and Bamigboye, 2021; Haladu and Bin-Nashwan, 2022), leading to narrow applications of sustainability in practice and education. These regulatory efforts have focused on significant public interest entities disregarding numerous local businesses and causing the paucity of sustainability awareness amongst excluded organisations.

Sustainability has less practical relevance within companies which dampens the demand for such expertise in PAE. In addition, there is an emphasis on the cost implications of sustainability transitions restricting the capacities of actors within the Nigerian setting (Erin and Bamigboye, 2021). Thus, it becomes difficult to make a case for sustainability amongst businesses because of high compliance costs and accountants who want to acquire knowledge in this area usually dependent expensive international education offerings. The issue of cost

was recognised in the remarks of one interviewee: *"it might not be very easy to talk about learning sustainability in the way I'm advocating, without looking at the financial cost implication"* (P30, ACP). Nigerian professional accountants have limited exposure and expertise on sustainability, making them unable to recognise its salience. Others may resist the impending change because they do not understand how it affects their role; a similar form of resistance was found in UK accounting profession.

Although professional accountants affirm their role in the sustainability agenda (Okwuosa, 2020), integrating sustainability into PAE in this context is confounded with limited access to knowledge and resource constraints. There has been a recent clamour for more sustainability regulations and education offerings from PABs as the Nigerian profession is greatly concerned about its competitiveness and legitimacy. Hence, it needs to measure up to global standards of accounting knowledge and expertise (Okwuosa, 2020). Despite a more constrained institutional arrangement, the integration of sustainability in PAE is made possible because the context readily responds to diffused international practices; given the right incentives, the State has the power to enforce change, and the contestation between the accounting profession and a new entrant in sustainability space also provides new prospects for the expansion of sustainability expertise and education.

8.4.1 Limited Agency and Concentrated Power

Institutional theory suggests that the capacity for agency is mediated by status, interests, and power (Suddaby, Cooper and Greenwood, 2007; Currie *et al.*, 2012). The Nigerian case provides insights about who has the power to channel changes in PAE with emphasis on the State's authority, the accounting profession's self-regulatory rights, and the privileged status of international professional organisations. Professionalisation literature establishes that the State is an important source of power in establishing and sustaining professional status claims

(Willmott, 1986; Cooper and Robson, 2006; Richardson, 2017), and expanding or constricting professional jurisdictions (Abbott, 2005). Findings on the authoritative power of the state in the Nigerian setting contrast with observations that coercive forms of power enacted by the State have become less potent in professional fields (Suddaby, Cooper and Greenwood, 2007; Hinings, Logue and Zietsma, 2017). The Nigerian accounting profession recognises that: "*the Government has overwhelming influence on the economy. […] So whatever policies Government carve it will definitely affect the fortunes of our members and also the training"* (P28, PAB). Yapa (2021) argues that the State-profession interaction in developing countries is a part of the larger political agenda that offers various forms of interventions and constraints.

PABs implement changes to the extent that the State permits; currently, several State agencies are deemed to be encroaching on the powers and functions previously delegated to the profession. Notwithstanding, PABs are the gatekeeper of education standards, but there is tension between the two primary PABs striving for legitimacy, relevance and survival (Uche, 2010; Afolabi, 2016). Nigerian PABs draw on international benchmarks from organisations such as IFAC and UK counterparts to seek legitimacy from the State, which holds power over the profession (Wallace, 1992; Parker, 2005; Uche, 2010). Some view the role of foreign professions as beneficial as an interviewee expressed: *"from the professional perspective, the likes of ACCA, CIMA, and the rest have also played a key role in influencing what is happening in Nigeria [….] they've changed the landscape*" (P29, ACD). However, the literature argues that relying on foreign figures perpetuates neo-imperial and capitalist ties long after the profession has been established (Poullaos and Sian, 2010; Yapa, 2021).

Foreign institutions have a privileged status in the current structure of Nigerian PAE and have considerable influence through the IESs issued by IFAC and mutual cooperation agreements with UK PABs, which serve as sources of normative power that can create changes in the field

(Suddaby, Cooper and Greenwood, 2007; Faulconbridge and Muzio, 2012). The interplay of national and foreign actors with various competing and sometimes conflicting interests conditions the integration of sustainability in Nigerian PAE. Table 8.20 below summarises the role and interest of the major actors in Nigerian PAE.

Table 8.20: Role and interests of actors in Nigerian PAE

S/N	Actor	Role	Interest
1.	The State (and its regulatory agencies)	Holders of authority over professional jurisdictions with regulatory oversight over the activities of business and professional accountants	Upholding the political agenda and meeting national economic goals
2.	Professional accounting bodies	Gatekeepers of professional education standards responsible for controlling membership by specifying the rules of entry, certification process, and post-qualification requirements	Gaining legitimacy over activities, maintaining relevance, and ensuring survival
3.	International professional organisations (such as IFAC)	Carriers of professional norms with influence over global professional matters including education	Exercising global influence and implementing comparable education benchmarks

Source: extracted thematic summary from the Nigerian empirical analysis in Ch 7.4

8.4.2 Pathways for Integrating Sustainability into PAE

The prior discussion on the role and interest of key actors in Nigerian PAE is associated with the pathways for integrating sustainability into PAE. The first pathway is channelled through PABs, as gatekeepers of the profession acting to institute sustainability into accounting education and practices in Nigeria. The dependency of practice on PAE and CPD programmes provides substantial prospects for PABs to lead sustainability literacy among accountants.

Although education exposes accountants to some level of sustainability knowledge, there is limited opportunity for these emerging knowledge schemas to become grounded in practice. One PAB pioneered the Nigerian Integrated Reporting Council (NIRC) to advocate for sustainability within regulatory requirements and corporate practices. Therefore, the profession seeks to align practice, education, and regulation by establishing sustainability initiatives that create normative associations within the field (Covaleski, Dirsmith and Rittenberg, 2003; Suddaby and Viale, 2011).

The accounting profession has deployed some strategies to assume its role in the sustainability agenda, such as creating committees on sustainability issues, liaising with businesses and practitioners, and offering sustainability-themed seminars and workshops. Table 8.21 below depicts the use of institutional work to interpret the intentional actions of Nigerian PABs in instituting sustainability.

Table 8.21: Actions of Nigerian PAB to institute sustainability into PAE

Type of action by PAB	**Institutional work**
• Encourage organisations and businesses to adopt sustainability practices. • Liaising with regulators about sustainability policies and actions	Advocating
• Creating awareness of sustainability through mandatory continuing professional development programmes and syllabus upgrades	Educating
• Establishing sustainability initiatives and working groups that includes professionals from all spheres	Constructing normative networks

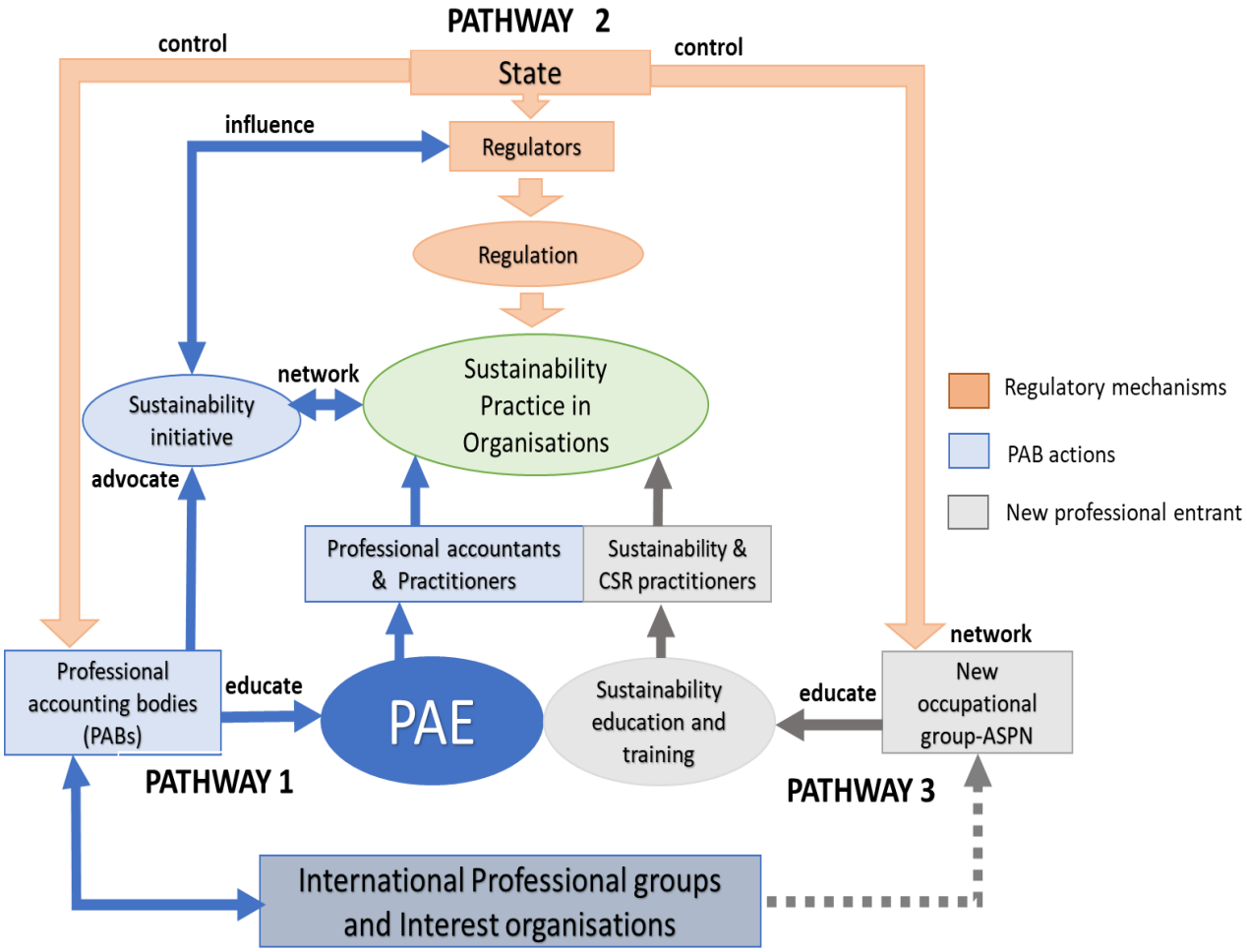
Source: Author's elaboration from Nigerian empirical analysis in Ch 7.5

Pathway two involves the regulatory mechanisms of the State and its agencies, which appears to be the most effective channel to enforce the integration of sustainability into PAE. As a result, PABs have used advocacy efforts to influence regulators (see Table 8.21). Indeed, regulatory requirements have increased, and the most recent updates include the Nigerian Climate Change

Act (2021), requiring public and private entities to work towards national carbon reduction targets and the 2021 Nigerian Sustainable Finance Principles, which creates a mechanism for implementing the SDGs (Adu, Dosumu and Randle, 2023). There is a strong stance about the role of regulation as declared by an interviewee with experience as an accounting practioner: "*locally we need to have that that framework in terms of regulatory and sustainability practices, and because there's regulation as it's practiced, when we are teaching, we are mindful of the regulatory issues."* (P30, ACP).

In Nigeria, "s*ustainability as a field or as a field of practice or profession has existed, […] but it's now becoming something that's seen as a profession."* (P22, ACD). Sustainability as an emergent issue in Nigeria opens up the space for various professional groups, to claim a new area of expertise and come together to form a separate sustainability profession channelling a third pathway of change in the field. Jurisdictional disputes between professionals are common within contested field-level changes (Covaleski, Dirsmith and Rittenberg, 2003; Taminiau and Heusinkveld, 2020). Both sides deploy strategies in their favour as rivalry develops between contesting professions to claim legitimacy in the sustainability field (Ziestma et al., 2017). The new entrant of 'sustainability professionals' utilises similar tactics of educating and creating networks to establish itself within this field. Both professional groups (accountants and non-accountants) seek out foreign professional alliances in their path to claiming legitimacy, as well as being the conduits for global professional norms in the Nigerian space. The three pathways to change are depicted below in figure 8.21.

Figure 8.21: Illustrating the pathways for integrating Sustainability in Nigerian PAE



Source: author's depiction from Nigerian empirical analysis, Ch 7.5

The accounting profession possesses higher leverage as incumbents to ensure that they maintain their professional status and extend their professional boundaries into the sustainability space (Zietsma and Lawrence, 2010), which in the case findings was expressed as accountants *"taking their rightful place"* (P02, HYB). Given the contestations in the Nigerian context, within the accounting profession and between different professional groups, the pathways of change may become disorderly, requiring political interventions. As sustainability evolves in the Nigerian professional field, regulatory agencies and the market are likely to become arbitrators and

mediators of rules and roles (Abbott, 2005). The next section of the chapter discusses the functional ways of embedding sustainability into PAE.

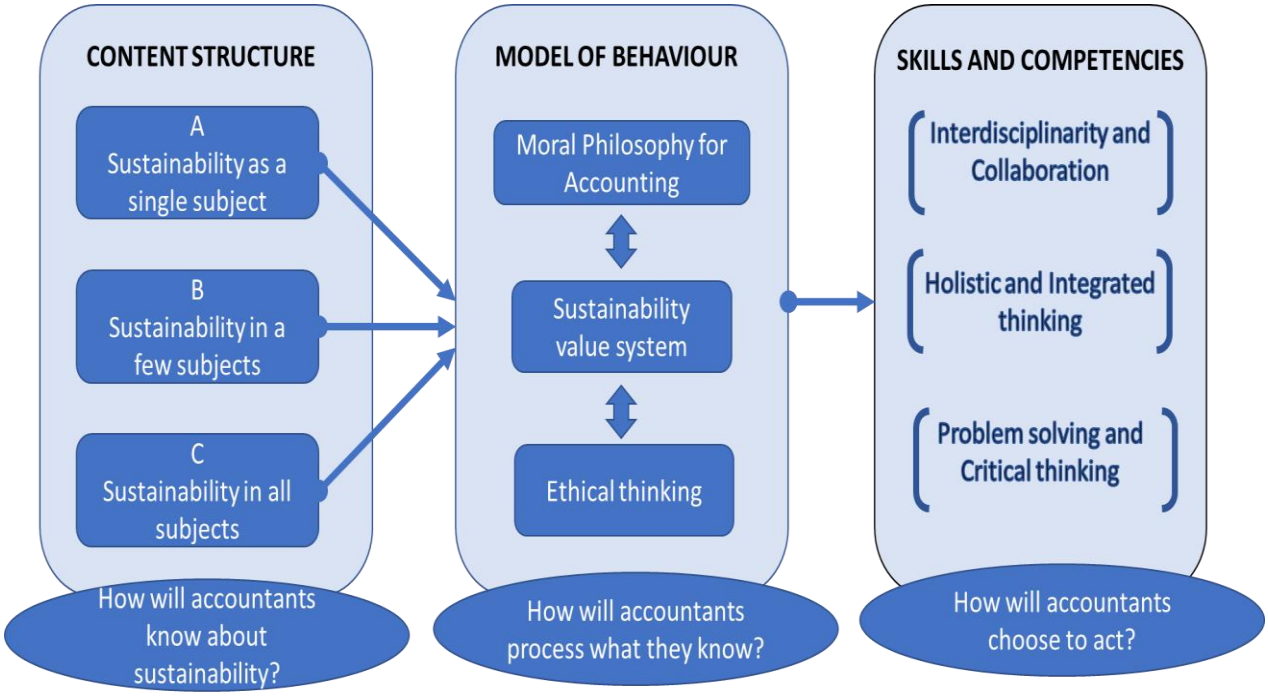
8.5 Embedding Sustainability in PAE

Thus far, the discussions in this chapter demonstrate that embedding sustainability is often not a straightforward choice about curriculum, teaching, or assessments. Designing a PAE programme that thoroughly embeds sustainability should consider the established PAE knowledge framework, global best practices on sustainability education, and varying constraints amongst educators and institutions. Following decades of criticism about accounting education[37], the IES framework has been advanced to standardise PAE spanning various jurisdictions, particularly in the face of the globalised economy, labour force mobility, and national factors (Calhoun and Karreman, 2014). Therefore, it serves as a useful template for embedding sustainability in PAE.

According to a joint stakeholder survey by the ICAEW and Accounting Bodies Network (ABN) in 2018, the integration of sustainability into PAE means that sustainability is incorporated into the syllabi and examined in some way (Izza, 2018). The UK case findings discussed substantial strategies and options for integrating sustainability into PAE, whereas the Nigerian case was inexplicit about the practical approach to sustainability education for accountants. Based on the UK findings, Figure 8.22 offers a framework for implementing sustainability into PAE mirroring key elements of the IES framework for professional training.

[37] See Flood (2014) and Boyce et al.(2019) for discussions on the criticisms of accounting education

Figure 8.22: Embedding sustainability in the pillars of PAE**.**



Source: author's illustration from UK empirical analysis in Ch 6.6

The first pillar in the PAE framework describes the form in which sustainability topics are offered and contemplates the content design for what accountants need to know about sustainability which has relevance to their technical competence (IES 2). Putting the main options into perspective, one interviewee explained; *"there's an argument for having a separate module with some really passionate academics leading it. And there's also an argument for having an element in every module. For a hybrid where you have a big sustainability module that really does it to death and then there is a tangential reference in every module"* (P04, ACD). The option to have sustainability separate subject and assigning enthusiastic and appropriate teachers to deliver it is termed 'deep digging' (Mburayi and Wall, 2018). Another alternative would be offering sustainability in a few subjects where there is particular relevance, also known as piggybacking; and the third proposed option is including sustainability in all

subjects with interconnected discussions across all areas, known as mainstreaming (Mburayi and Wall, 2018).

Nevertheless, previous studies found that piggybacking and deep digging were the most common approaches to embedding social and environmental concerns in accounting degrees (Stevenson, 2002; Mangion, 2006; Stevenson and Thomson, 2010; Cho *et al.*, 2020; Russell *et al.*, 2021), and also amongst UK PABs introducing sustainability into professional training (Owen, 2013; Paisey and Paisey, 2014). However, some university educators embrace a critical pedagogy that seeks to enable deeper student engagement in sustainability knowledge (Thomson and Bebbington, 2004; Coulson and Thomson, 2006; Gray, 2013). While UK interviewees expressed considerations on the three options for integration, mainstreaming was emphasised as the most appropriate for holistic integration as advocated in this statement: *"the easiest way is to have it as a core part of the syllabus, and to make sure that it is infused throughout all of the considerations that are examined and taught"* (P13, ACD). Holistically embedding sustainability in accounting subjects presents some practical challenges; however, specific examples prove it is achievable, such as the University of Birmingham's project to mainstream climate change in the accounting degree (University of Birmingham, 2022).

The second pillar covers ethics and the expected moral behaviour of accountants. Although the profession has a prescribed code of ethics and professional behaviour widely taught to accountants as contained in IES 4, some scholars blame accounting education for insufficiently addressing ethics and moral standards (McPhail, 2001; Wyhe, 2007; Boyce *et al.*, 2019). According to a UK interviewee, *"[Sustainability] links with ethics because an ethical accountant would want to consider sustainability issues in the way they advise management"* (P10, PAB). Therefore, one can argue that sustainability decisions by accountants will need to be enabled through an ethical foundation for processing their technical knowledge and making

critical choices (Saravanamuthu, 2015). The ESD literature describes such ethical foundation as a normative competence that implies reflexivity on sustainability principles, goals, and targets that guide decisions in conflicting situation (Wiek *et al.*, 2016). Bearing in mind ethical expectations, accountants are required to have an attitude of responsibility, accountability, and stewardship towards nature and society, which links to sustainability values encapsulating their public interest commitment. A reconsideration of the moral ethos of accounting is necessary for reforming PAE to embrace sustainability fully, but this also raises the problem of how ethics can be taught to accountants without indoctrination (McPhail, 2001; Ferguson *et al.*, 2011; Boyce, 2014).

For the final pillar, accountants would require specified skills and competencies that underlie their capacity to act in complex and ambiguous real-world situations. Employers have expressed greater interest in a professional accountant's skills and generic competencies for the workplace above technical subject knowledge (Flood, 2014). Skills and competencies have become an established part of the accounting education reforms for several decades, currently mentioned under IES 3 as professional skills and attitudes (Paisey and Paisey, 2014; Boyce *et al.*, 2019). The findings emphasise that *"the application and the skills behind [sustainability] are more important than understanding about the individual standard or framework, so that's where the competencies come in"* (P17, PAB). Therefore, the accounting profession in the UK and Nigeria recognises the value of skills and competencies for embedding sustainability into PAE.

Three skillsets were deemed relevant for embedding sustainability in PAE from the UK findings: interdisciplinarity and collaboration, holistic and integrated thinking, problem-solving and critical thinking. Likewise, the Nigerian case emphasises problem-solving, system thinking, strategic thinking, and collaboration. These skills relate closely to the sustainability

competency framework proposed by Wiek, Withycombe and Redman (2011), as shown below in Table 8.22:

Table 8.22: Sustainability competencies for PAE

Sustainability skills and competencies for accountants (Based on empirical findings)	**Sustainability competency framework** **(**Wiek, Withycombe and Redman, 2011)
• Interdisciplinarity and collaboration • Collaborating with other professionals	**Interpersonal competency** – ability to interact, collaborate, and solving problems with others from various backgrounds and disciplines
• Holistic and integrated thinking • System thinking and strategic thinking	**Systems thinking competency** - ability to understand interconnections and analyse complex systems across different levels
• Problem-solving and critical thinking	**Strategic competency**- the ability to map and implement a course of action towards sustainable outcomes

Source: extracted from UK and Nigerian empirical findings in Ch 6.6 and Ch 7.6

The nature of sustainability problems may differ by location and time frame, but these skills can be used to guide a critical direction for solutions and implementation. For this reason, these competencies cannot be viewed independently of one another, as they are deployed concurrently to solve complex and wicked problems that sustainability entails. One Nigerian interviewee demonstrates that combination of competencies for accountants to address sustainability '*[Sustainability is] going to make accountants think more holistically rather than just focusing on the finance aspect of it. and how accountant can also work with other professionals in unison to achieve the global agenda on sustainability'* (P30). Wiek Withycombe and Redman, (2011) assert that interdisciplinarity is at the core of other sustainability competencies because it builds collective capacity to address the issues. For instance, applying interdisciplinarity would require using knowledge from various sources to

think holistically about a specified problem and resolve such a problem through collaborative efforts (De Haan, 2010; Wiek, Withycombe and Redman, 2011).

There are challenges to assessing the extent of sustainability integration in PAE (Paisey and Paisey, 2014; Bebbington, Larrinaga and Thomson, 2021), especially across the scope of the three pillars discussed above because it depends on the PAB and their context. Boulianne et al. (2018) highlight that while IFAC mentions sustainability in IES 2 and 4, the Canadian CPA competency map does not address sustainability. In the French context, sustainability education is treated as a specialist area of knowledge for accountants (Boulianne, Keddie, and Postaire, 2018). Such disparities in practice reemphasise the value of a holistic design approach to sustainability in PAE. Furthermore, it is simplistic to presume that embedding sustainability at a knowledge level would lead to responsible behaviours and deployment of competencies toward a sustainable future without further dissecting other parts of the education process (Kemmis and Mutton, 2012).

The challenge with PAE is that expectations change quickly, and the increasing skill requirements overburden the training process leaving limited space to address sustainability. Knowing the limitations around PAE, the aim of integrating sustainability in PAE is to design learning processes that will enable accountants to become sustainability literate, develop competencies, and understand how they can respond skilfully and ethically to sustainability issues which are uncertain, highly contextual, and for which there is no universally perfect answer.

8.6 Implication of Findings

The prior discussions elaborate the empirical findings using the theoretical framework and relevant literature. This section explicitly answers the four research questions by considering

the implications of preceding discussion of findings. Two points provide an answer to the first research question on how the profession is evolving to integrate sustainability into PAE, detailed in section 8.1. First, evolutionary change is informed by the past (habitual aspect), oriented towards the future (enabling emergence), and focused on the present (adapting within current limitations), which have been emphasised in both CAS and Institutional theory (Holland, 1992; Ford, 2008; Battilana and D'Aunno, 2009; Micelotta, Lounsbury and Greenwood, 2017).

The accounting profession is cognisant of its past and origins and continues to seek legitimacy and relevance; it has also continued to articulate its desire to serve the public interest irrespective of how contradictory it may appear in relation to other purposes within the profession. The profession foresees how disruptions and external pressures around sustainability will shape the future and the need to re-organise and adapt to these pressures to survive. After all, the accounting profession has not always prioritised sustainability, as it took time for the profession to discern and accept that sustainability is germane to accounting and its educational process and that it will impact its development going forward.

Additional evidence of the profession's evolution is seen in the endeavour to interpret sustainability into accounting knowledge frames. From the findings, radical perspectives were often relegated and less emphasised based on the argument that they have minimal practical relevance to accounting. Pragmatism is a core focus in terms of sustainability, the accounting profession, and PAE; implying that elements of accounting and sustainability are recombined to ensure that the change process evolves gradually (Campbell, 2009; Micelotta, Lounsbury and Greenwood, 2017). Furthermore, sustainability views expressed within the profession have evolved over time, with risk and ESG being the latest iterations. While the profession can be argued to be following an evolutionary path towards the integration of sustainability, the scope

of change on this pathway is yet to be determined. On one hand, transformational change is possible if the profession overturns or alters pre-existing values and shared meanings; on the other hand, developmental change will only require modifying current elements rather than discarding them (Micelotta, Lounsbury and Greenwood, 2017). The nature of the profession's evolution to incorporate sustainability in PAE becomes evident in later discussions about the influence of structure and actors in integrating sustainability in PAE.

The second research question focused on ascertaining how structural aspects influence the integration of sustainability into PAE. Here the findings demonstrate that structure can be viewed from multiple interrelated layers. A higher-order structure is emphasised in CAS theory that shows aggregated system functions, whereas a lower-order structure emphasises the institutional arrangement that can differentiate each profession (Kim, 2005). At the higher order, there are feedback mechanisms that facilitate and moderate the integration of sustainability into PAE. Dissecting the feedback mechanism, changes in regulation and practice have the strongest (pressure) influence; practice and research show quicker effects (pace) in enabling sustainability integration in PAE. These findings emphasise a degree of path dependency but recognise that changes in PAE can happen at different frequencies based on which element in the landscape pilots the influence (Dooley, 1997; Holland, 2006; Folke, 2019). Predicting the sequence of changes in PAE would be difficult because each adjoining domain interacts concurrently to produce emergence effects.

Much of the high-order structural patterns are not replicated in the Nigerian professional setting because it operates under different institutional arrangements and socio-political contexts. The institutional arrangements in Nigeria are contested because of limited networks, intense competition among PABs, and less enforceable boundaries due to State intervention (Hinings, Logue and Zietsma, 2017). In contrast, the UK is more established with expanded networks and

greater capacity amongst actors, enabling the complex and adaptive behaviours observed in the findings (Hinings, Logue and Zietsma, 2017). This way, structures can be enablers or constraints depending on their functionalities. In Nigeria, structure poses a greater constraint, such as political interference, resource limitations, and modest educational infrastructures. One aspect of structure that provides an enabler is the linkage between the Nigerian profession and international affiliates such that Nigeria becomes a dispersal site for professional norms. In the UK, the institutional structure is more resilient and able to re-organise around the change process as enabled by distributive agency, but the profession needs to follow a more convergent change approach in realigning its structures to avoid fragmentation.

The association between structural aspects and agency has been a challenge in many theorisations of field-level change. Using the perspective of agency discussed in the Institutional theory, actors are dynamic and capable through their diverse roles, interests and power to act reflexively towards field changes (Wooten and Hoffman, 2008; Battilana, Leca and Boxenbaum, 2009; Micelotta, Lounsbury and Greenwood, 2017). The third research question aims to understand the influence of actors in the process of integrating sustainability into PAE. The theoretical framing delineates capacity, which includes role, interests, and awareness as a precursor to strategic action defined through institutional work to interpret the agency of actors from the findings. Both cases reveal that each actor has a direct or indirect role in PAE, but it is their interest that motivates their actions. UK actors have dispersed interests and roles, each seemingly significant enough to contribute to the change process. In contrast, Nigerian setting actors have limited agency because the power of the State, the profession, and affiliated international institutions mean that other actors are compelled to follow the direction of these actors.

Furthermore, the UK study finds that actors with aligning interests are more likely to work together towards field-level changes, while those with disparate interests are more likely to be involved in conflict about the mode of change concerning PAE sustainability reforms. Professionals seek changes that align with market demands, whereas accounting academics are more likely to seek a model of change that expands the area of knowledge. Power and influence also affect the capacity of each actor to drive change using compelling or persuading approaches. Some actors have more compelling influence in PAE, with exemplars being the State and employers in the UK and the State in Nigeria. Other actors in an established field, such as the UK, including accounting academics, accounting trainees, and tuition providers, exhibit influence over PAE and may use it to engage powerful actors into causing changes. Some features of the landscape operationalise the power relations among actors, one of which is accreditation schemes that shape the relationship between PABs and universities. In this regard, PABs can demand universities to incorporate sustainability into their degree programmes to meet accreditation requirements.

Actors shape the extent and manner of sustainability integration in PAE by engaging in institutional work. PABs are active in this space as administrators of the accounting education process; however, resistance from various quarters seeks to prevent change. The profession undertakes creative work to ease resistance and usher in new structures and norms (Lawrence and Suddaby, 2006). In the Nigerian case, evidence of institutional work is seen through the advocacy efforts towards regulatory agencies, creating new normative networks through sustainability initiatives, and educating to generate sustainability awareness. In the UK, institutional work takes place through several modes, such as capitalising on the public interest obligation as a form of mimicry, changing normative associations by reorienting mindsets and values in accounting, reconstructing the identities of professional accountants as trusted

business advisors, and boundary work that affirms emergent sustainability concepts and the need to expand the frontiers of accounting beyond business towards nature and society. All these activities are organised alongside PAE reforms to integrate sustainability.

Finally, the fourth research question exploring how to embed sustainability into PAE recognises three essential pillars that make a competent accountant defined in the IES: the knowledge structure, ethics and morality, and skills and competencies. There are choices about how to fit sustainability into the accounting knowledge structure under three options: piggybacking, deep digging, and mainstreaming predicated upon various perspectives. Mainstreaming sustainability in all accounting subject areas is thought to be the most effective, yet it is the most challenging to implement. Other alternatives of including sustainability as a separate subject (deep digging) or in a few subjects (piggybacking) can be useful starting points for educating accountants about sustainability based on resources and practical constraints.

Ethics are critically material to discussions of sustainability as they speak to the normative underpinnings of accounting and the expected behaviour of an accountant. Sustainability should be explicitly addressed in professional ethics and behaviours in the public interest. As accountants know more about sustainability, they need to understand how to apply their knowledge and ethics in situations, which can be further enhanced through a competency-based approach advocated in the ESD literature (Wiek et al., 2011; Wiek et al., 2016). Core competencies for sustainability include interdisciplinarity and collaboration, holistic and system thinking, and problem-solving and critical thinking. Ultimately, this design proposition on embedding sustainability into PAE is not a definitive approach but offers a guide for implementing a learning process that can produce sustainability literate and competent accountants.

8.7 Summary

This chapter offered a consolidated discussion of the findings from the UK and Nigeria cases to show the various pathways and dynamics for integrating sustainability into PAE. Furthermore, the discussions in this chapter, alongside the literature and theoretical framework, culminated in the evidence to address the research questions. The discussion elaborates on the process of change at macro and mezzo scales, including the antecedents to sustainability in PAE, the enabling and limiting potential observed through structural patterns, the peculiarities of institutional arrangements, the way actors seek to institute change, and the pragmatic choices within the education process.

The development of sustainability in PAE indicated that the profession is seeking to evolve to address sustainability demands, with education being one of the areas where such evolution takes place. The profession is on board with the needed changes, provided it serves its interests and purpose. The potential for evolution is determined by how much it can integrate sustainability into accounting knowledge frames which are demonstrated by the conceptualisations of sustainability in the field. Structural pathways are viable in a system with an elaborated structure, such as the UK, and visible influences can be seen around the impact of regulation, practice, and research to enable sustainability integration in PAE. Overall, the pace of change is slower because of how education functions in relation to the rest of the accounting activity domains – practice, research and regulation. Structural aspects of the field can be constraining when the institutional infrastructures are limited, such as in the case of Nigeria, where change is mainly dependent on the regulatory mechanism.

Actors play a crucial role in channelling change; some are more proactive about the needed changes, while others are less persuaded. The profession manages the interests of these actors, mainly because they know some will resist the integration of sustainability into PAE. Resistance

is an attempt to ensure the stability of the field; however, reconfiguration is necessary when resistance is no longer serves the profession's purpose. Several elements of the profession need to be re-configured to aid the integration of sustainability, including the underlying principles, norms, roles, mindsets and identities of accountants. While the bulk of the issues to be addressed may be at the institutional level, the latter section of the chapter shows several choices to be made in a sustainability driven PAE design. Sustainability can be integrated into PAE via several channels, including knowledge structure, ethics, and competency framework. Integrating sustainability into PAE includes structural, institutional, and PAE design changes that would reflect the current limitations and prospects to make professional accountants valuable to the sustainability agenda.

The next chapter concludes this thesis, and it will include a summary of the research project, contribution to knowledge and policy, reflections on the research project, and future research suggestions.

CHAPTER 9: SUMMARY, REFLECTIONS AND CONCLUSION

9.0 Introduction

The concluding chapter of this thesis summarises the research and its findings, outlines the contributions to the research area, and provides a reflection on the research project and outcomes. It also discusses the limitations of the study and offers suggestions for further research.

This research project aimed to investigate the conditions and pathways for integrating sustainability into professional accounting education and explore the contextual factors underpinning the process. Rather than focusing solely on the design and delivery of PAE, the thesis examined how the accounting profession evolves its practices to include sustainability in its education mechanism and the influence of structural elements and diverse actors using the UK and Nigeria as case studies. The thesis also proposes avenues for holistically embedding sustainability into the PAE framework. To this extent, the findings of the study elucidate the overarching enablers and constraints for accountants to acquire sustainability knowledge and skills through their professional training.

The rest of the chapter contains four sections. Section 9.1 summarises the research and highlights the key findings. The empirical, theoretical, and practical contributions of the research are outlined in section 9.2, thereafter section 9.3 reflects on the research process and outcomes from the researcher's point of view. Lastly, section 9.4 describes some of the limitations and suggests areas for future research.

9.1 Summary of the Research

This thesis set out to critically examine the process of integrating sustainability into PAE arising from various deliberations about the role of accounting and the profession in contributing to the

sustainability agenda (Bebbington and Larrinaga, 2014; Bebbington and Unerman, 2018), and the exigency of expanding the capacity and expertise of accountants through education to become change makers for sustainability transformations (Gray and Collison, 2002; Collison, Ferguson and Stevenson, 2014; Boulianne, Keddie and Postaire, 2018). The literature review offered sufficient grounding on how the accounting profession handles changes in its knowledge base and education reforms. It also identified a crucial gap in previous studies of sustainability in accounting education, which rarely addressed the implication and mechanisms for integrating sustainability into the professional training of accountants. On this basis, the study adopted institutional theory and CAS perspective that have been applied to studying professions and structural change processes involving different scales and change patterns. Combining multiple theories captures the multi-layered dimension of the research questions and provides unique learning opportunities that can enhance analytical insights (Hoque, Covaleski and Gooneratne, 2013; Burau and Andersen, 2014).

Therefore, the intermediating theoretical framework developed from the synthesis of CAS and institutional theory bridges the understanding of how exogenous and endogenous factors drive change, dissects the influence of structural aspects at the system and institutional levels, and deepens the analysis of actors' roles in channelling change. This theoretical approach is suited to contemporary realist philosophies balancing aspects of objectivism and subjectivism (Cunliffe, 2011), and a qualitative case study design that examines the process of change in the UK and Nigerian accounting professions. The selected cases have been analysed in two phases using documents and semi-structured interviews. Since context is a significant factor in investigating change, the thesis maps and discusses the contextual differences and similarities by which sustainability becomes integrated into PAE in the UK and Nigeria. It also presents an

initial application of CAS theory and system mapping technique using documentary analysis to visualise the UK PAE system in Chapter 5.

The empirical findings of this research have been presented in chapter 6 for the UK case and chapter 7 for the Nigerian case following the thematic analysis of semi-structured interviews with diverse groups in the PAE system, such as accounting academics, professional accounting bodies, tuition providers, regulators, and professional interest institutions. The UK accounting profession operates in an established institutional field because of its extensive structure, defined roles and identifiable networks among several actors (Hinings, Logue and Zietsma, 2017; Zietsma *et al.*, 2017). Alongside technology, sustainability is recognised as a leading issue driving PAE reforms because it has become a mainstream agenda, there is a business case to address sustainability within organisations, and it resonates with the profession's public interest obligation. As the profession seeks to maintain its legitimacy and relevance, the importance of integrating sustainability in PAE intensifies. UK PAE already incorporates varying degrees of sustainability material which will further coevolve with changes in regulation, practice, and research on this topic. Actors in the UK profession are proactive through networks to execute changes in the profession and its education mechanisms but must address various forms of resistance emanating from several quarters in the field. Irrespective, there are clear propositions about further changes required in designing a sustainability enriched PAE for accountants to be proactive in the sustainability space.

The Nigerian case findings share with the UK profession the notion and strategy of capturing the sustainability field. However, Nigeria differs in terms of the degree of competition amongst PABs and lack of structural coherence, typifying a contested field condition (Hinings, Logue and Zietsma, 2017; Zietsma *et al.*, 2017). PAE reforms are driven by the pressures of globalisation in accounting practices, knowledge, and regulation which links to the motivations

for integrating sustainability into PAE. To remain competitive and maintain legitimacy, the Nigerian profession is often a dispersal site for foreign norms, as foreign actors strongly influence institutions in the field and the profession defines progress according to global expectations. PAE is also dependent on local regulation, and the profession relies on the political and legislative powers of the State to coordinate the activities of various actors and resolve jurisdictional disputes with other professionals claiming expertise in the sustainability arena. Overall, the findings show that once there is an established and standardised global model and framework for sustainability that receives local political and legislative support, Nigerian PABs can justify the full adaptation of sustainability into their education mechanism.

In Chapter 8, the case findings are interpreted and discussed with reference to theory and literature to explain the various pathways and dynamics of integrating sustainability into PAE and address the research questions. Regarding the first research question, the accounting profession evolves based on external pressures of the environment from which sustainability emanates and relies on reinventing itself to fit the expectations of the era and achieve the goal of legitimacy and future resilience. On one hand, the profession sees sustainability as a threat such that failure to align could lead to its demise, yet sustainability also provides the opportunity for expanding the jurisdiction of accounting work and knowledge. Hence, the ongoing effort of conceptualising sustainability in accounting influenced by various ideologies, values, and perspectives.

On the second research question, structural aspects influence the integration of sustainability into PAE on two levels. Based on a CAS perspective, the first level of structural influence involves feedback mechanisms in the sub-systems of accounting: regulation, practice, research, and education (Lee, 1989; Preiser *et al.*, 2018). Practice and regulation have profound effects on accounting education because they exhibit higher pressures on the profession, but regulation

usually takes longer to effect changes. Research has an innovative power that can be translated into education, practice and regulation but exerts low pressure for change. Based on the institutional field, the next structural level highlights the enabling and constraining conditions for integrating sustainability into PAE. The UK profession has a mature institutional structure that is resilient towards change, although the profession seeks collaborative change involving diverse stakeholders with diverging interests. In Nigeria, the institutional structure of the profession is more fragile depending on the influence of foreign professional institutions to institute initiatives and the authority of the State to legitimate outlined changes.

Regarding the third research question, the role and interests of actors reflect their different capacities for engaging in the integration of sustainability in PAE. PABs have the most significant influence over PAE, but their actions are driven mainly by the State, which regulates the jurisdiction of accountants and the employers, who determine the worth of accounting expertise. Actors in an established field such as the UK can exhibit distributive agency whereby every actor can contribute to PAE reforms without seeking recourse to powerful actors (Battilana, Leca and Boxenbaum, 2009). In Nigeria, actors are limited in their capacity for reforms and often resolve to appealing to the regulative power of the State (Suddaby, Cooper and Greenwood, 2007). Reflexive action originates from the capacity of actors, such as awareness, position, and power (Lawrence, 2008). Actors in PAE use various forms of institutional work such as advocacy, boundary work, changing normative association, constructing normative networks, constructing identities, educating, mimicry, and theorising to channel change (Lawrence and Suddaby, 2006). Also, the type of institutional work deployed to integrate sustainability in PAE will vary by the capacity of actor and institutional context.

On the final research question, the ESD competency framework by Wiek et al. (2011) is useful for designing sustainability education programmes even for the accounting profession. For embedding sustainability in the accounting knowledge structure, educators should appropriately consider whether sustainability content should be a single subject (deep digging), topics in specific subjects (piggybacking), or holistically across all subjects (mainstreaming) based on resources and capacities. While the third approach is believed to be more suitable (Gray, 2019), there are possibilities of mixing approaches. For instance, sustainability can be introduced as a stand-alone subject with certain topic elaborated in other core subject areas. Beyond content, the profession should explicitly embed sustainability in professional ethics and ensure it permeates practical competencies such as problem-solving, systems thinking, and interdisciplinarity.

9.2 Contributions of the Research

This research contributes to the accounting literature in several ways. The findings contribute to previous studies on change in the accounting profession, PAE reforms, and sustainability in accounting education. It demonstrates the application of CAS as a potential theoretical approach for tackling research problems in accounting, offers useful concepts for triangulating theories, and enlightens the application of theoretical triangulation strategies with the widely adopted Institutional perspective in accounting literature. Also, the research insights will interest educators, PABs, and policymakers seeking to integrate sustainability into PAE. These contributions are discussed as follows.

9.2.1 Empirical Contribution

Empirically, studies examining professional change typically focus on a single case setting. Given the internationalisation of accounting, Berry and Otley (2004) call for other research beyond Anglo-accounting literature to focus on cross-national and cross-cultural case studies,

which has salience for the 'under-researched' African context. Professionalisation paths in different countries are interrelated to an extent, yet professions will exhibit different strategies for change based on contextual factors (Yapa, 2021). Within the UK profession, contentions are more internally driven by different segments of the profession, for instance, academics versus practitioners, whereas external professions and foreign associations drive field-level shifts in Nigeria. The structure of the UK profession promotes top-down and bottom-up change allowing observable non-linear change mechanisms. In comparison, the structure and context of the Nigerian profession encourage top-down changes in a linear manner from the State or the profession itself. International professional associations exemplified by IFAC, aid and facilitate strategic coordination among national professions with different capacities to act and enact changes in PAE, leading to greater diffusion of norms and practices between settings. These insights from different professional settings contributes to existing knowledge of how professions adapt their practices and knowledge frames to sustainability based on their operational contexts.

Gray and Collison (2002) note that the deficiencies of PAE are not resolvable by introducing modifications in PAE but rather require considering the fundamental debates about the role of education and the various interests embedded within it. As such, this thesis assists our understanding of PAE reforms as conditioned by the structure of the profession and the expectations and role of actors such as universities, professional bodies, accounting academics, regulators, tuition providers and so on. Past studies in accounting education have mapped out various dimensions that condition reforms of PAE. Some have focused on the global influences of accounting education and the stakeholders (Calhoun and Karreman, 2014); others have examined different models of accounting education (Nelson, 2014) or discussed the intersections between university accounting education and professional training (Paisey and

Paisey, 2014). This thesis provides one of the first empirical investigations that holistically maps the landscape of PAE, including the functionalities and interactions of actors which shapes the outcomes of any PAE reforms.

In mapping the PAE landscape, this thesis characterises a four-way feedback process between accounting education, practice, research, and regulation building on prior work that has focused on two-way interactions (Singleton-Green, 2010; Guthrie and Parker, 2016) or three-way interactions (Laughlin, 2011; Duff, Hancock and Marriot, 2020). Rather than viewing the gaps and lags in the interactions of accounting sub-systems as limitations or deficiencies, the findings have focused on understanding what it means for the profession more broadly and how interventions can be used to advance change. To this end, the findings also propose leverage points for instituting changes in PAE, particularly on embedding sustainability. These findings advance an alternative view to reoccurring debates about PAE reforms by addressing macro-level interactions in the structure of the profession.

Decades of research on sustainability accounting have produced advancements in the areas of practice and regulation, with education falling behind in comparison. One of the aims of this research was to address the gap in sustainability accounting education research which have focused on specific accounting courses, degree programmes, or university initiatives. This thesis contributes to the limited line of research investigating sustainability integration in professional training (see Owens 2013, Boulianne et al, 2018; Boulianne, Postaire, and Keddie, 2018). While these vital studies evaluated the prevailing status and approach to sustainability integration in PAE, this thesis extends the existing knowledge by outlining the future pathways for incorporating sustainability based on emerging pressures, antecedents in the profession, power dynamics, and efforts from various elements of the profession. Furthermore, the research outcomes assist our understanding of how educating accountants on sustainability has

implications beyond the curriculum, including shaping their ethical behaviour, competencies, mindsets, values, and identity.

9.2.2 Theoretical Contribution

The theoretical contribution of this thesis is applying a novel CAS approach to the accounting literature and demonstrating the value and implication of triangulating such an approach with the extensively adopted Institutional theory. As this research is interested in mezzo-level change in the profession, CAS theory became a suitable approach based on its application in other professional settings to characterise how and where accountants will develop their professional knowledge and practice around sustainability issues. The propositions of CAS theory offer an alternative theorisation of change enabled by the functionalities in accounting sub-systems and to visualise the process through a systemigram that encompasses their interconnections.

Deploying CAS theory to study PAE also serves to understand the conceptualisation of pace and non-linearity in the professional change process, which are concepts that are not fully developed in the Institutional theory literature. Elaborating these concepts through CAS theory are valuable to explain the pathways of change particularly when distinguishing between revolutionary and evolutionary paths without undertaking longitudinal studies. Alternatively, Institutional theory aids the understanding of changing PAE through notions of institutional field dynamics. Several studies have examined various elements of Institutional field change in the accounting profession (Greenwood, Suddaby and Hinings, 2002; Greenwood and Suddaby, 2006; Suddaby, Cooper and Greenwood, 2007; Leicht and Fennell, 2008; Suddaby and Viale, 2011), but none considered changes in the accounting knowledge base and PAE in relation to sustainability. This research also contributes to the institutional theory literature by clarifying critical dimensions of agency, such as the connections between power, resistance, and institutional work in producing field effects (Lawrence, 2008). The theoretical approach of this

research validates the use of institutional theory and its conceptual tools without necessarily being confined to the contemporary streams of the theory which has become the common approach in the accounting literature (Alvesson and Spicer, 2019).

Institutional theory has been triangulated in different forms with several other theories, including those with the same underlying assumptions and those without (Burau and Andersen, 2014). The theoretical application in this thesis identified that both CAS and institutional perspectives have common assumptions as well as distinctions in conceptual tools. Therefore, their application involved carefully navigating between multiple concepts to explain the treatment of each theory. Another research contribution is providing a guide to theoretical triangulation that attends to the analytical tools of each theory while combining their explanatory power to resolve the research questions. The researcher devised three conceptual ideas for theoretical triangulation; bridging concepts from the similarities in both theories, elaborative concepts from shared interpretations that are better analysed in one than the other, and disparate concepts that have specialised meaning in each theory and cannot offer an equivalent explanation. The triangulation approach in this study facilitated careful navigation of numerous dimensions of concepts, for instance, the explication of different layers of structure between the CAS and the institutional field. It also allowed learning points between both theories, for instance, in elaborating on the causes of system change and field evolution. Hence, the study demonstrates an innovative attempt at merging Institutional perspective with CAS theory.

9.2.3 Practical and Policy Contribution

The main practical contribution of this thesis is understanding how reforms in PAE to integrate sustainability can be effectively implemented to produce sustainability literate and competent accountants. Accounting education reforms must begin with engagement that seeks to create

dialogue and resolve conflicts before modifying curriculum and content (Gray and Collison, 2002). The research findings demonstrate that the profession needs to resolve fundamental questions for integrating sustainability in PAE, including what we mean by sustainability? What role do accountants have to play? What role does the profession have to play? To varying extents, PABs have the responsibility and capacity to integrate sustainability in PAE; but certain policy recommendations are best applied within each case. In Nigeria, the profession is still at the awareness creation stage and needs to ensure that its students and members grasp the significance of sustainability as it relates to Nigeria independent of foreign norms and pressures. Additionally, there is a need to build capacity by training educators on the implications of sustainability for accounting knowledge and how to teach it, as well as promoting research on sustainability that address issues peculiar to Nigeria.

Policymakers and PABs in the UK should consider the possibilities for translating academic research to inform changes in PAE towards sustainability rather than solely focusing on practices and regulations to drive change (Laughlin, 2011). The findings indicate that since research is a source of innovation, establishing stronger links between accounting research and PAE can produce an accounting education orientated towards a sustainable future, shaping the trajectory and attributes of professional accountants. Since consensus was identified as a condition for change, there is need for greater dialogue amongst actors involved in UK PAE, not just those with power or influence.

By providing a model of sustainability education for accountants based on IFAC's IES specification, this research can assist PABs and other related institutions globally to integrate sustainability into their education programmes. Linking sustainability to all accounting knowledge areas is deemed the most effective and should be the ideal; but a valuable starting point is introducing a separate compulsory sustainability module that makes tangential

references to core aspects of accounting. Sustainability should be explicitly tied to professional ethics, including a moral philosophy that connects with values of stewardship, accountability, and responsibility. Likewise, sustainability must be included in the competency requirement for accountants which must translate into learning outcomes, assessments, and work-based scenarios. Holistically incorporating sustainability into the PAE framework may appear daunting, but there are increasing examples that it is achievable, and every institution can have different starting points leading up to holistic integration.

9.3 Reflections on the Research project

Chua (1986) recognises that value-free research is a misconception, and the researcher makes a judgement about their role and relationship to the research phenomenon. Reflexivity is also crucial to recognise that research is value-laden (Saunders et al., 2019), emphasising the researchers' role in analysing the topic of interest and probing beyond empirical observation to produce meaningful findings (Cresswell, 2009). Therefore, Saunders et al. (2019) advise researchers to be aware of the role of self, be open to understanding their predispositions and positionality, and acknowledge the learning opportunities. This reflection contains personal motivations for the study, decisions on the research approach, challenges of research in the Covid-19 era, and thoughts on the research outcomes mostly narrated in first-person language to signal the researcher's voice.

This research project started with an interest in sustainability and deep considerations of the relationship between social and environmental issues and accounting. As a student, I was introduced to social and environmental matters during my accounting master's programme; later, as an academic, I had the opportunity to design and lead the environmental accounting module at the undergraduate level. My interest and experiences initiated the idea of studying sustainability and accounting education. The research idea was then refined by examining prior

literature to establish the research gap and further discussions with my supervisors before choosing to focus on PAE rather than university education. I approached the research project with the mindset that PAE holds a central position for accountants to acquire sustainability knowledge, and PABs have a significant role in this. Also aligned with my interests and the recognised research gap was ensuring that the project investigates the Nigerian context and that the research outcomes are relevant to PAE in Nigeria and other developing countries.

Following months of research method courses and training, I weighed the various research strategies between case studies, surveys, and ethnography and their implications for the study. While I eventually decided to choose a case study approach for analytical and pragmatic reasons, I needed to resolve contentions and uncertainties about my philosophical position and theoretical approach, which would shape the nature of the case study design. The endeavour to clarify the theory, philosophy, and research strategy was an iterative process re-evaluated at each stage of the research journey until it reached a degree of coherence. At the earlier stage, deliberations on how to map the PAE landscape led me to consider the systems thinking perspective. I eventually learnt about CAS scholarship whose insights have been applied beyond the accounting discipline to understand professions and process-oriented change. At the same time, institutional theory was always the leading theoretical option, having been numerously used in organisational studies, particularly to examine change processes in professions. However, I encountered challenges applying institutional theory because it was a meta-theory with several sub-streams and innumerable concepts (Alvesson and Spicer, 2019).

A significant learning point in the research process occurred while attempting to map the system of PAE using the CAS approach and system mapping technique. Although this task was challenging, it enabled me to develop the skills and aptitude for using diagrams to explain and

visualise various aspects of the thesis[38]. Another dilemma during this research was applying two distinct theories to address the research aims since there are many ways to triangulate theory (Burau and Andersen, 2014). On this matter, I revisited fundamental questions about my view of social reality (ontology) and knowledge production (epistemology)[39]. Addressing these questions made me understand that the choice of theory and research strategy decisions were not as pragmatic as I initially believed. On answering these questions, I could identify that my philosophical perspective incorporated versions of realism and aspects of social constructionism and learnt that the selected theories were epistemologically oriented for mapping contexts and studying systems, processes, and change (Morgan and Smircich, 1980; Cunliffe, 2011). Rather than adopting theories as a lens to see the social world, I adopted the theoretical framing as a limb to execute research aims derived from my value commitments and worldviews (Tweedie, 2020).

While planning is important in research, various unforeseen events may arise. Four months into the research, in March 2020, Covid-19 was declared a global health emergency, and the UK enforced a complete lockdown. I confronted the dilemma of conducting research and collecting interview data during a pandemic. I worked from home for several months, and most of the research interviews were conducted online for the UK case. I planned to travel to Nigeria for fieldwork, but the process became even more problematic due to travel restrictions during the pandemic, and I was infected with Covid-19 just before my trip to Nigeria. I deferred travelling to Nigeria for a month, which delayed my research plans. I could not have envisaged Covid-19 and its impact on my research, especially overcoming several challenges. One unexpected advantage of the Covid-19 pandemic on the research project was the reduction in travel time

[38] See chapters 2, 3, 4, 5 and 8 for various diagrammatic representation of aspects of the thesis.
[39] See chapter 4 – methods for further discussion.

and costs of reaching participants for interviews. It was relatively easier to schedule and conduct interviews online, with most participants working from home during the lockdown.

I also gained experience from conducting pilot interviews, which helped to revise the interview guide and made me mindful of my interview style when handling participants from diverse backgrounds. There was a significant difference in the attitude and perceptions of interviewees in the UK and Nigerian settings. While most UK interviewees were expressive in responding to the interview questions, several Nigerian interviewees were more conservative. I was initially concerned about the extent of data that could be obtained from the Nigerian case due to the general attitude, which improved after some interviews. Participants vary in their knowledge and expertise of sustainability, affecting their opinion on the subject. Another learning experience was conducting joint interviews, offering a unique opportunity to handle the interview format involving two interviewees and one interviewer.

Another challenge with qualitative research involving multiple cases is the vast amount of data to be handled and analysed (Scapens, 2004), but this approach can reveal differences within and across settings generating rich empirical and theoretical explanations (Ryan, Scapens and Theobald, 2002; Ridder, 2017). I expected to find similarities and differences in integrating sustainability into PAE based on the features of the UK and the Nigerian contexts. Yet, it was surprising that both professions were synchronised in seeking to maintain their reputation and future relevance. These shared understandings and views re-emphasised the extent of alliance within the accounting profession and its purpose caused by globalisation and the harmonisation of accounting norms. Another reason for this synergy of purpose could be the rooted connections between UK and Nigerian professionalisation processes (Uche, 2010). Furthermore, both cases viewed the accounting profession as adaptable to change, reinventing itself through its education system (Gray and Collison, 2002). Even when change appears

radical, the antecedents are known to the professions, and they devise mechanisms to ensure stability and resilience.

Professional aspirations may be similar, but pathways and outcomes will differ since each profession faces distinct set of enablers and constraints. I came to understand that the institutional environment and structure will influence the extent and form of sustainability integration in PAE and its effects on the expertise of accountants. Developing countries like Nigeria will require greater resources and institutional support to make sustainability a fundamental part of PAE compared to the UK. Actors in Nigeria are driven by economic interest due to the country's socio-economic problems; interviewees rarely mentioned the public interest regarding the profession or sustainability. Socio-economic challenges may be beyond the remit of the accounting profession, but they can have a role in reorienting the mindset of accountants to grasp the salience of sustainability matters. While not directly addressed in this thesis, the findings further caused me to reflect on the predicament and need for decolonising accounting knowledge frames (Alawattage *et al.*, 2021), as accounting knowledge is an implicit instrument of colonisation dominated by Anglo-American ideologies (Hopper, Lassou and Soobaroyen, 2017), and the construction of accounting education and knowledge is often colonised by powerful groups (Boyce *et al.*, 2019).

9.4 Limitations and Suggestions for Future Research

While this research project has proffered several significant contributions, it still has limitations in certain respects which presents opportunities for future research. The conditions and pathways to integrating sustainability into PAE examined in this thesis albeit crucial, offer just one perspective to the education journey of accountants. Due to limited capacity and time, other important phases of accounting education were not addressed in this thesis. The profession has always emphasised life-long learning; equally, Wilson (2011) argues for alignment in the

various levels of accounting education; university degree, professional training and CPD to make an effective accountant. Although beyond the scope of this research, several interviewees stressed the need for sustainability literacy amongst qualified accountants as most PABs have limited CPD offerings on sustainability. Therefore, future research should consider the integration of sustainability into CPD and how this might differ from the approach of other educational phases, since CPD is often the responsibility of individual accountants.

Another limitation arises from using a Mezzo level unit of analysis for this research, resulting in the failure to account for variability amongst PABs in terms of capacity, resources, and strategies for educating accountants on sustainability, and the exclusion of micro level practices that shape change. There are significant disparities in the approach to PAE even amongst PABs in each country which were not fully analysed in this thesis. One way to remedy this limitation is to conduct a macro survey that assesses the scope, coverage, and depth of sustainability in PAE offered by various PABs across the world. Such a large-scale study could foster an understanding of the variations in the extent, approaches, and orientations to sustainability in professional training and its implications for global accounting expertise given the internationalisation of accounting. Alternatively, future research can undertake an ethnographic study to keenly investigate the process by which one PAB seeks to integrate sustainability into its education offerings which may require a longitudinal time frame. Researching different units of analysis will necessitate applying suitable research methods to produce nuanced insights on the topic of interest.

An important insight from this thesis that can benefit future research is the connection between the accounting sub-systems and how they influence the integration of sustainability in PAE. Some of the discussions presented in the thesis could reflect a lack of appreciation of how education influences the other domains. Thus, a worthwhile progression from this thesis would

be to investigate how sustainability education influences practices in firms and organisations, demonstrating the prospective outcomes of integrating sustainability into accounting education, whether at university or professional levels. It could also address how accountants who have encountered sustainability during their training differ in expertise and behaviour from those who have not received any form of sustainability education. Such studies could inform defining minimum sustainability literacy expectations bridging the gaps in educational backgrounds amongst accountants.

In conclusion, the basis of change regarding sustainability be it in PAE or any other area matters more and should be founded on a common purpose of seeking the common good for all peoples (Spencer, 2020). For PAE specifically, there will be unifying elements in the change process but there is scope for variety with adequate attention to context and capacity. Accountants' knowledge and competencies on sustainability must be grounded at the level of professional education to become translated into other areas of professional life.

APPENDICES

Appendix 1: Documentary Data sources

Appendix 1a: List of Organisations and Documents

TYPES OF DOCUMENTS	ACTOR GROUP
Annual report of Organisations	
ACCA 2020 - Integrated-Report 2019	PAB
CIMA 2019 - Annual Report and Financial Statements	PAB
UN PRME 2020 - Annual-Report 2018-2019	Sustainability initiative
UNGC 2019 - Annual report	Sustainability initiative
ANAN 2021 - Annual report and Financial Statements 2020	PAB
ICAN 2021 - Annual report and Financial Statements 2021	PAB
ICAN 2018 - Annual Report and Financial Statements 2018	PAB
Commitment report to United Nations Global Compact	
ACCA 2017 - UNGC Communication on Progress 2017	PAB
ACCA 2019 - UNGC Communication on Progress 2019	PAB
EY 2019 - Communication on Progress FY2019	Big 4
CIMA 2019 - Communication on Engagement 2017-2019	PAB
ICAEW 2020 - Communication on Engagement	PAB
Insight report on trends in sustainability disclosures of organisation	
Deloitte 2019 - UK annual report-insights: survey of FTSE reporting 2019	Big 4
KPMG 2020 Sustainability reporting trend: the time has come	Big 4
PWC 2019 -Sustainability award report 2019	Big 4
PWC 2020- Excellence in sustainability reporting	Big 4
GRI 2020 - Carrots and sticks 2020 interactive report	Sustainability Standard setter
KPMG 2022 - Survey of Sustainability Reporting in Nigeria	Big 4
KPMG 2022 - Nigerian climate change act report 2021	Big 4
Professional Insights on Sustainability	
ACCA 2016 - Professional Accountant the future: Drivers of change and future skills	PAB
ACCA 2017 - SDGs and accountancy profession	PAB
CIMA 2018 - Creating a sustainable future: The role of the accountant in implementing the Sustainable Development Goals	PAB
CIPFA 2015 - Guide to Public Sector on Producing a sustainability report	PAB
ICAS 2017 - SDGs and the integrated report	PAB
IFAC 2016 - The 2030 Agenda for Sustainable Development: A Snapshot of the Accountancy Professions Contribution	Professional coalition
Other professional insight reports	

CIMA 2018 - Changing competencies mindsets CGMA	PAB
IFAC 2019 - Future Fit Accountant Roles	Professional coalition
IFAC 2019 - Future Fit Accountant Vision Report	Professional coalition
Kaplan 2016 - Global trends in Professional accounting education	PTP
Professional education guidelines and syllabus	
ACCA Qualification structure diagram	PAB
ACCA CPD quick guide	PAB
CIPFA Professional Accountancy Training Employer Guide	PAB
CIPFA Professional Accountancy Training Student Guide	PAB
ICAEW 2020 - ACA Syllabus Handbook	PAB
ICAS 2020 - Chartered Accountant Syllabus 2020-21	PAB
IFAC 2019 - Handbook of International Education Standards 2019	Professional coalition
ICAN 2019 - ICAN Accredited tertiary Institutions	PAB
ICAN 2020 - professional examination syllabus	PAB
ICAN - Recognised tuition centre	PAB
Progress report on SDGs	
UK DFID 2019 - SDG Voluntary National Review Report	State Agency
Nigeria 2017 - Integration of the SDGs into National Development planning: Voluntary national review 2020	State Agency
Nigeria 2020 - Implementation of the SDGs- A National voluntary review	State Agency
Nigerian Sustainability regulations	
CBN 2012 Nigerian Sustainability Banking Principles	Regulator
Climate Change Act 2021	State Agency
Nigerian Securities and Exchange commission 2021 - Guidelines on sustainability financial principles for the Nigerian capital market	Regulator
Survey report on sustainability and education	
EAUC- NUS 2018 - sustainability in education state of the sector report 2018	Universities
UN SDG Accord 2019- Progress towards the Global Goals in the University and College sector	Universities
FRC reports and guidelines	
FRC 2019 - Climate Professional Oversight	State Agency
FRC 2020 - Accounting Profession Key Facts and Trends-2020	State Agency
FRC 2021 - Accounting Profession Key Facts and Trends 2021	State Agency
UN reports on SDGs	
UN 2015 - Agenda for Sustainable Development report	Intergovernmental organisation
International accounting standards global status report	
IFAC-2019 - International standards 2019 global status report	Professional coalition

IFRS 2018 - Use of IFRS around the world overview	Accounting Standard Setter
Accounting standards on sustainability issues	
IFRS 2020 - consultation-paper-on-sustainability-reporting	Accounting Standard Setter
TCFD 2018 - Climate Change Report	Sustainability Standard setter

Appendix 1a: List of website sources

Organisation	Details	Link
A4S	A4S Aims	https://www.accountingforsustainability.org/en/about-us/overview.html
	2018 Survey results- attitude of professionals to Sustainability	https://www.accountingforsustainability.org/en/knowledge-hub/reports/2018-survey-results.html
	Who we work with	https://www.accountingforsustainability.org/en/who-we-work-with.html
ACCA	Members of the Global Forum for Sustainability	https://www.accaglobal.com/gb/en/technical-activities/global-forums/sustainability/forum-members-sustainability.html
	Sustainability and the ACCA Qualification	https://www.accaglobal.com/gb/en/member/sectors/sustainable-business/acca-qualification.html
BPP	About Business education	https://www.bpp.com/business
CAI	CAI Course description	https://www.charteredaccountants.ie/Prospective-Students/Course-description
	CAI Sustainability at Chartered Accountants Ireland	https://www.charteredaccountants.ie/sustainability-centre/about/sustainability-at-chartered-accountants-ireland
	CAI Sustainability Expert working group	https://www.charteredaccountants.ie/sustainability-centre/about/expert-working-group

CIMA	Academic research	https://www.cimaglobal.com/Research--Insight/Research-Funding/
CIPFA	CIPFA Exemptions	https://www.cipfa.org/qualifications/exemptions
FRC	The FRC and its regulatory approach	https://www.frc.org.uk/getattachment/67835f0e-e4c2-4d2a-9aeb-e57feed885be/FRC-Roles-Responsibilities-Schedule-of-Functions-Powers-June-2017.pdf
	FRC 2019 Stewardship code Consultations	https://www.frc.org.uk/consultation-list/2019/consulting-on-a-revised-uk-stewardship-code
	FRC 2020 Oversight of the Accountancy Profession	https://www.frc.org.uk/auditors/professional-bodies-supervision/oversight-of-the-accountancy-profession
ICAEW	Sustainability committee	https://www.icaew.com/technical/sustainability/sustainability-committee
	About academic research funding	https://www.icaew.com/technical/research-and-academics/about-academic-research-funding
ICAS	ICAS CPD requirements	https://www.icas.com/members/icas-cpd-requirements
	ICAS How to become a Chartered Accountant (CA)	https://www.icas.com/become-a-ca/how-to-become-a-chartered-accountant-ca
	ICAS' involvement in global sustainability networks and forums	https://www.icas.com/landing/sustainability/icas-and-sustainability/icas-involvement-in-global-sustainability-networks-and-forums
	ICAS Sustainability Panel _ ICAS	https://www.icas.com/landing/sustainability/non-financial-reporting/sustainability-panel

	ICAS research funding at ICAS	https://www.icas.com/professional-resources/research/Research-at-ICAS/research-funding-at-icas
IFAC	IFAC 2020 United Kingdom overview	https://www.ifac.org/about-ifac/membership/country/united-kingdom
	IFAC 2020 Nigeria - overview	https://www.ifac.org/about-ifac/membership/profile/nigeria
IFRS	IFRS Foundation Trustees consult on global approach to sustainability reporting and on possible Foundation role	https://www.ifrs.org/news-and-events/news/2020/09/ifrs-foundation-trustees-consult-on-global-approach-to-sustainability-reporting/
ICAN	Getting Started for ICAN	https://icanig.org/students/professional-students
ANAN	Nigerian college of Accountancy- Admission requirements	http://nca.anan.org.ng/admission-requirements/
	Nigerian college of Accountancy - Education and Training	http://nca.anan.org.ng/education-and-training/
UNGC	Overview UNGC	https://www.unglobalcompact.org/
UN PRME	Overview UN PRME	https://www.unprme.org/
GAA	Overview GAA	https://www.globalaccountingalliance.com/
CAW	Overview CAW	https://charteredaccountantsworldwide.com/
WBCSD	Overview WBCSD	https://www.wbcsd.org/Overview/About-us

Appendix 2: UK PAE System Mapping Index

Actors	Level of Participation	Components	Activities and Initiatives	Role and Interest
1. International Institutions				
The United Nations (UN)	Global	• UNESCO • UN Global Compact • United Nations University (UNU) • UN-HABITAT • UNCTAD • UN Global Compact • UN DESA • UN Environmental Programme	• United Nations Decade of Education for sustainable development (UN DESD) 2005-2014 • United Nations Principles for Responsible Management Education (UN PRME)-2007 • Global Universities Partnership on Environment and Sustainability (GUPES) -2012 • Global Action Programme on Education for sustainability - 2015 • Higher Education Sustainability Initiative (HESI) 2019	• Setting Broad Framework and Policies • Creating Systems of Partnerships and Dialogue • Global Engagement/outreach
International Federation of Accountants (IFAC)	Global	• International Accounting Education Standards Board (2006-2019) •	International Education Standards 2019 • IES 2- Competencies for Sustainability/Integrated Reporting • IES 4- Commitment to Social Responsibility • IES 8- Skills transferability to apply to different problems and scenarios for sustainability	• Setting Framework and Policies within Accounting Profession • Regulation of Accounting Education Standards for members
The Environmental Association of Universities and Colleges (EUAC)/the alliance for sustainable leadership in education	Regional National	• Sustainability Exchange • SORTED • The global Alliance • Green Gown Awards	• The green gown awards for sustainable leadership in Universities • The sustainability exchange is a leading resource for sustainable • information especially for Higher Education institutions	• Strategic Alignment of Institutions • Research and Knowledge exchange resources • Advocacy and Engagement

			• Sustainable leadership Scorecard to assess organisation's sustainability performance • SDG Accord is a mechanism to keep the HESI momentum alive and stimulate and assess SDG progress amongst universities and colleges	• Partnership and Collaborations with Universities, Organisations and UN bodies
2. State	National			• Setting Framework and Policies • Regulation (the Profession, Universities, Business Organisation) • Partnership, Support and sponsorship
3. Universities (& Business Schools)	Global Regional National Local	• Association of University Leaders for Sustainable • Universitas 21 (U21) • Global Universities Network for Innovation (GUNI) • Environmental Association for Universities and Colleges (EAUC) • Globally Responsible Leadership Initiative (GRLI)	• Talloires Declaration 1990 (among several other declarations) • Signatory- United Nations PRME • Signatory- Higher Education for Sustainability Initiative (HESI) 2019 • Reporting- SDG Accord • Aim2Flourish	• Regulation of Education Standards • Facilitating Knowledge Exchange at all levels (individuals and institutions) • Partnerships and collaboration with other stakeholders • Research
4. Professional Accounting Bodies	Regional National Local	• Institute of Chartered Accountants of England and Wales (ICAEW) • The association of chartered certified accountants (ACCA)	• Accounting for Sustainability (A4S) • Chartered Accountants worldwide	• Regulation and accreditation of accounting education Standards • Partnership with Universities on training of accountants • Collaboration with Big 4 Firms and Accounting practitioners

		• Chartered Institute of Management Accountants (CIMA)		• Partnership with International Organisations and Business organisations • Advocacy within Global, Regional and local levels
5. Business Organisations	Global Regional	• UN Global Compact		• Partnership with other stakeholders • Sponsorship of education for sustainability initiatives
6. Accreditation Institutions	Regional National	• Association to Advance Collegiate Schools of Business (AACSB) • European Foundation for Management Development (EFMD) • Academy of Business in Society (ABIS) • Association of MBA (AMBA) • Association of African Business schools (AABS) • Central and East European Management Development Association (CEEMAN) • Accreditation council of Business Schools and programs (ACSP) • Latin American council of Management Schools (CLADEA) **Others**	• UN PRME - Partnership	• Regulation of Education Standards • Partnership with other relevant stakeholders (UN, state, Universities etc)

		• Professional Accounting Bodies (see 4)		
7. Big 4 Accounting Firms	Regional National	• Deloitte • Price Waterhouse Cooopers (PWC) • Ernst and Young (EY) • KPMG		• Partnership with Professional Bodies, Universities, Businesses, International organisations and AACSB • Sponsorship • Sustainability Assurance Services- Skills and competencies Framework • Consultations on Policy
8. Accounting Academics	Regional Local	• Centre for social and environmental accounting		• Research & Teaching • Consultations on Policy • Engagement with other organisations
9. Accounting Students	National Local	• National Union of Students (NUS) • ENACTUS		• Engagement with relevant stakeholders • Advocacy & Support • Expectations from Learning
10. Accounting Practitioners	National and Local			• Consultations on Policy • Engaging with professional bodies and Universities

Appendix 3: Ethical Approval and Documentations

Re: "Integrating Sustainability into Professional Accounting Education"
Application for Ethical Review ERN_20-0810

Thank you for your application for ethical review for the above project, which has now been reviewed by the Humanities and Social Sciences Ethical Review Committee.

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for your project, subject to your adherence to the following conditions:

- A risk assessment must be signed off in line with the RAMP process (https://intranet.birmingham.ac.uk/hr/wellbeing/worksafe/policy/Research-Risk-Assessment-and-Mitigation-Plans-RAMPs.aspx) prior to any face-to-face work or, travel to FCO orange/red areas.

For clarification, as long as the conditions above are met and the details of the proposed work do not change, your project has ethics approval and no further action is necessary.

I would like to remind you that any substantive changes to the nature of the study as described in the Application for Ethical Review, and/or any adverse events occurring during the study should be promptly brought to the Committee's attention by the Principal Investigator and may necessitate further ethical review.

Please also ensure that the relevant requirements within the University's Code of Practice for Research and the information and guidance provided on the University's ethics webpages (available at https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Links-and-Resources.aspx) are adhered to and referred to in any future applications for ethical review. It is now a requirement on the revised application form (https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-Forms.aspx) to confirm that this guidance has been consulted and is understood, and that it has been taken into account when completing your application for ethical review.

If you require a hard copy of this correspondence, please let me know.

Kind regards,

Ms Sam Waldron
Research Ethics Officer
[redacted]
University of Birmingham
Edgbaston B15 2TT

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PARTICIPANT INFORMATION SHEET

1. Research Title

Integrating sustainability into professional accounting education

2. Eligibility of Participant

You are invited to participate in this study because of your knowledge and experience or affiliation with key institutions that influence professional accounting education and sustainability. Therefore, your expertise is of great value in addressing the objectives of the research mentioned above.

3. Purpose of the Research

This research explores the integration of sustainability into professional accounting education to understand how sustainability knowledge and competencies fit into the training stage of professional accounting education and to examine the contextual differences that affect such integration. Therefore, the project will address the following objectives:

a) Determine how the system of professional accounting education adapts to sustainability issues.
b) Understand the role of actors in influencing the integration of sustainability into professional accounting education.
c) Examine the integration of sustainability into the various levels of professional accounting education.

4. Participants' Roles and Rights

Your decision to participate in this study is completely voluntary. The key responsibilities and rights of participants are listed below:

a) You are requested to participate in a one-to-one interview or informal discussion between 60-90 minutes at a convenient time and location.

b) You are requested to sign a consent form to indicate your agreement to be a part of this study.

c) The interview will include questions relating to the topic and objectives stated above but you may choose not to answer any of the questions during the interview.

d) The interview will be audio-recorded though you may opt-out of being audio recorded and the researcher will take extensive notes instead.

e) You have the right to withdraw from the study within three weeks after your participation without giving a reason by contacting the researcher. All data related to you will be deleted as soon as possible after receiving your notification to withdraw.

f) You will not be identified in the thesis or any related publication but you have the right to request knowing how your comments are used in the thesis before submission or in

other materials submitted for publication (you will be notified of submission dates accordingly).

g) Institutions may be requested to provide documents such as professional training curricula, list of continuing professional development programmes, study materials covering sustainability topics, minutes of curriculum review meetings, and education reports. You are under no obligation to provide these documents. Relevant documents collected will be used **ONLY** for research purposes.

5. Benefits of Participation

There is no direct compensation or immediate benefits for your participation in this research. However, you will receive a summary report on the outcome of this research and how it might be applied to assist the accounting profession to build better policies that will help address sustainability through accounting expertise. Additionally, your participation would contribute to the agenda for building sustainability competencies of professional accountants and help change professional accounting practice to contribute positively to achieving global sustainability.

6. Risk of Participation

The only risk of participating is the possibility of losing the anonymity of the data provided. The researcher has taken careful consideration to ensure that all information provided is kept confidential from all external party including your institution. External transcribers may be used in the study and will comply with the UK General Data Protection Regulation (GDPR). There are no negative consequences for your decision to participate.

7. Ensuring Confidentiality and Data Protection

a) Full anonymity and confidentiality of institutions may be difficult to guarantee since there is publicly available information about the structure professional accounting education and sustainability initiatives.
b) Your participation will not be disclosed to any third party. The data you provide will **ONLY** be accessible to the researcher and supervisors.
c) Interviews will be transcribed as soon as possible, and personal identifiers are replaced with anonymized code. Indirect identifiers such as roles and experience may be included in the study.
d) UK transcription service provider which may be used to transcribe interviews must comply with the UK General Data Protection Regulation (GDPR) and offer up-to-date data encryption protocols in compliance with the University of Birmingham requirements.
e) All forms of data collected in the study will be kept in password-protected devices or locked storage accessible only by the researcher team.
f) The research data will be stored securely for a maximum period of 10 years after the submission of the thesis at the University of Birmingham research data archive.

8. Ethical Review

This project is reviewed by the University of Birmingham, Research Ethics Committee.

9. Funding

This research is funded by a scholarship from the Birmingham Business School, University of Birmingham, UK.

10. Research Team Contact

Ph.D. Researcher
Bisola Joloko
Department of Accounting
Birmingham Business School
University of Birmingham
Email: [redacted]

Supervisor
Prof Jan Bebbington
Professor of Accounting and Sustainable Development
Department of Accounting
Birmingham Business School
University of Birmingham
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Co-Supervisor
Dr. Elisavet Mantzari
Lecturer
Department of Accounting
Birmingham Business School
University of Birmingham
Email: [redacted]

[Thank you]

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PARTICIPANT CONSENT FORM

Research Title
Integrating sustainability into professional accounting education

Research Team:
Researcher- Bisola Joloko
Supervisor- Prof Jan Bebbington
Co-Supervisor- Dr Elisavet Mantzari

I, the undersigned, confirm that (please tick (✓) the box if you agree with the statement)

1.	I have read and understood the information sheet dated 21st October 2020	☐

2.	I have been allowed to ask questions about the project and received satisfactory answers	☐
3.	I voluntarily agree to participate in this study, and I am fully aware that I am not obliged to answer any questions, but that I do so at my own free will	☐
4.	I understand that I am free to withdraw my participation at any time during the study without giving any reason by notifying the researcher. Also, I will be able to withdraw my data up to 3 weeks after data collection.	☐
5.	I agree that my interview will be audio-recorded and that personal identifiers will be anonymized once the interview is transcribed.	☐
6.	I agree that anonymized quotes and information from my interview would be used in the thesis and publications from the study	☐
7.	I understand the use of research data, confidentiality, storage, and archiving based on the University of Birmingham data management policy	☐
8.	I understand that this project has been reviewed by and received ethics clearance through the University of Birmingham Research Ethics Committee. I am aware that if I have any comments or concerns about my participation in this study I can contact the research ethics officer (email: **aer-ethics@contacts.bham.ac.uk** or phone +441214148825)	☐
9.	I agree to sign this consent form alongside the researcher	☐

Kindly include additional notes if there are any concerns:

I agree to participate in the above study

_____ _____ _____

Name of Participant Date Signature

I certify that I have presented the above information to the participant.

_____ _____ _____

Name of Researcher Date Signature

When completed: 1 for participant: 1 for the researcher

Appendix 4: Interview Guide



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Main Interview Series Guide

Date_____ Category_____

A. Preliminary introduction followed by information about the nature and purpose of the research.

Hi. My name is Bisola Joloko and I am PhD researcher at the University of Birmingham researching on PAE and Sustainability. Thank you for agreeing to talk to me about this topic.

Start Recording:

Is it ok if I ask you a few questions based on your experience in PAE?

I hope you have read the information sheet. Do you have any questions?

I would like to remind you that participation is completely voluntary, you do not have to respond to every question. If you would like to stop at any point during the interview, please let me know. Do you consent to me recording this interview?

B. Background Information: I'll start by asking you some background questions.

1) What is your age?
2) Where is your location?
3) What are your qualifications?
4) How many years of professional experience do you have?
5) Can you please briefly tell me about your professional experiences?
6) What is your current job?

C. Let's talk about: **The Structure of Professional Accounting Education:**

7) How does professional accounting education work in the UK?
8) Which institutions/actors are involved in this structure of professional accounting education?

9) What has changed about professional accounting education in recent times?

Probe:

a) Why do these changes happen?

b) What were the lessons from these previous changes?

D. I would like to ask you about **Influences in Professional Accounting education.**

10) Can you explain how regulations and policy affect professional accounting education?

11) How does professional accounting practice influence professional accounting education?

12) Can you explain how International professional education standards affect professional accounting education?

13) How do business needs and employer expectations affect professional accounting education?

14) In what way do accounting academia & universities influence professional accounting education?

E. I would like to ask you some question about **Sustainability in the phases of professional accounting education.**

15) What is your understanding of sustainability?

16) What aspects of sustainability do you think accounting expertise is most needed?

Probe:

a) How do you think the sustainable development goals (SDGs) have affected professional accounting education?

b) How do you think climate change issues have been incorporated into professional accounting education?

c) How do you think issues of modern slavery has been incorporated into professional accounting education?

17) What are the processes involved in changing professional accounting education to accommodate sustainability?

18) Can you explain how sustainability concerns are incorporated into professional qualifications?

Probe:

a) Which sustainability issues are covered in the curriculum/content?

b) In what way have tools and techniques of assessment integrated sustainability competencies?

19) How has the teaching and learning of accountants integrated sustainability competencies?

20) How does continuing professional development integrate sustainability competencies?

F. Issues in Integrating sustainability into professional accounting education

21) What are the motivations for integrating sustainability into professional accounting education?

22) What are the challenges in the process of integrating these sustainability issues into professional accounting education?

23) How do different institutions/actors affect the process of integrating sustainability issues integrated into professional accounting education?

Probe:

a) What were their contributions?

b) How were their views considered in the process?

24) How would you describe the interactions of the institutions/actors at various levels of integrating sustainability into professional education?

25) In what way will sustainability shape the knowledge, skills, or attributes that are relevant to the future accountant?

Closing Remarks

Do you have any additional comments or questions for me?

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