

**Dynamic Capabilities in Project-based Firms Operating Across sub-
Saharan Africa**

by

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Abstract

This qualitative study investigates the dynamic capabilities (DCs) that enable project-based firms to maintain operations across sub-Saharan Africa, a region characterised by institutional voids and complexity. Since existing DC frameworks are mainly developed for stable institutional contexts, little is known about how volatile environments influence DC development, especially for project-based firms operating through temporary, fragmented operations. Using an interpretivist philosophy and an exploratory approach, semi-structured interviews were carried out with key decision-makers from successful project-based firms working across multiple sub-Saharan African countries. Inductive thematic analysis identified four interconnected DCs crucial for sustained operations: relational intelligence capability, strategic partnership management, adaptive human capital systems, and decentralised operations and learning structures. The results challenge traditional DC classifications, indicating that capabilities deemed dynamic and vital for competitive advantage in stable markets are simply necessary for survival in sub-Saharan Africa. The study shows that project-based firms resolve the temporary-permanent dilemma by embedding knowledge within mobile core staff instead of rigid structures and by utilising flat organisational hierarchies with short feedback loops. This research contributes to DC theory by offering context-specific insights for institutionally complex environments and provides practical guidance for project-based firms aiming to establish sustainable operations in sub-Saharan Africa

Keywords

Dynamic Capabilities, project-based firms, Sub-Saharan Africa, institutional voids, relational intelligence, strategic partnerships, human capital systems, capability development, qualitative research

Plagiarism Declaration

I, Grant Prior, confirm that this research project represents my own original work. I am submitting it as a partial requirement for the Master of Business Administration degree at the Gordon Institute of Business Science, University of Pretoria. This work has not been previously submitted to any other university for any degree or examination.

I further confirm that I obtained all necessary ethical clearances and participant consents to conduct this research, in accordance with GIBS research ethics guidelines. All sources used in this study have been properly acknowledged and referenced.

I understand the consequences of plagiarism and take full responsibility for the content of this research project.

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03 November 2025

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LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|-----|---------------------------|
| CEO | chief executive officer |
| COO | chief operations officer |
| DC | dynamic capability |
| DCV | dynamic capabilities view |
| FDI | foreign direct investment |
| HR | human resources |
| OC | ordinary capability |

1. INTRODUCTION TO THE RESEARCH PROBLEM

This chapter introduces the study by providing background and context to the study, followed by a discussion of the purpose of the study.

1.1 BACKGROUND

Although sub-Saharan Africa remains one of the world's poorest regions, over the last decade or so, the region has experienced substantial economic growth (Boso et al., 2019). Several of the region's economies are amongst the fastest growing in the world. Much of this growth is driven by resource extraction and basic industrialisation, albeit from a low starting point (Owusu-Manu et al., 2019). However, as discussed by Nkemgha et al. (2023), the region still faces a profound infrastructure deficiency. The insufficient stock of productive infrastructure, such as transportation, telecommunications, water, and electricity, remains a significant inhibitor of economic development. According to Owusu-Manu et al. (2019), the annual monetary requirement to fill the infrastructure gap for Africa is estimated at US\$93 billion. As a result, the potential benefits from extracting resources, industrialisation, and other forms of growth are hindered, with productivity depressed by an estimated 40%.

A project-based firm is an organisation whose core business operations, value creation, and revenue stem from undertaking projects with a set duration, often for external clients (Denicol & Davies, 2022). These firms often operate in sectors such as engineering, construction, and extractives. In sub-Saharan Africa, as demand for the region's critical minerals—resources deemed essential for certain technologies or products—continues to rise and countries industrialise, infrastructure development is expected to accelerate throughout the region (Boafa et al., 2024; McNulty et al., 2021). Therefore, the successful operation of these firms, which often play a crucial role in large-scale infrastructure and project development, will have a significant impact on the region's economic and business landscape (Owusu-Manu et al., 2019).

However, operating in emerging markets such as those in sub-Saharan Africa presents significant challenges, primarily due to widespread institutional voids (the absence of the formal and informal institutions necessary for a healthy economy, such as legislation, regulations, and governing bodies) that increase transaction costs and create uncertainty (Andrews & Luiz, 2024). Bureaucratic red tape and

corruption are widespread in many sub-Saharan African countries, with businesses often unable to avoid these practices, posing a significant risk to both businesses that engage in such practices and those that choose not to (Adomako et al., 2024).

To remain competitive and survive in these complex environments, firms must develop and deploy unique dynamic capabilities (DCs). DCs are those that enable firms to adapt, innovate, and reconfigure their resources in response to shifting market conditions (Brock & Hitt, 2024). DCs allow firms to create and sustain competitive advantages and are particularly relevant in environments characterised by rapid change and uncertainty (Teece, 2018). The development of DCs enables firms to deliver superior long-term performance by allowing them to continually adapt and innovate (Gölgeci et al., 2019). Further evidence of this is provided by Barbosa and Carvalho (2024), who highlight that there is a strong and mutually reinforcing relationship between the development of DCs and the long-term success of project-based firms.

To illustrate the challenge of conducting business across sub-Saharan Africa, several real-world examples can be drawn, particularly of South African companies that have expanded their operations across borders. While many companies have managed this transition successfully, numerous others have failed to sustain their business across the entire region. In some cases, their group-wide downfall was partly influenced by the challenges faced in sub-Saharan Africa.

Examples of failures of project-based firms can be found across sectors and industries, including retail, telecommunications, and banking. For example, Shoprite, which, after an aggressive expansion into the continent, has, over the last four years, withdrawn from seven African markets, citing currency devaluations, supply chain disruptions, regulatory bottlenecks, and disappointing returns on investment as reasons (Ekanem, 2025). One of Shoprite's largest competitors, Game, is following a remarkably similar path, citing similar reasons for the company's withdrawal. Although MTN remains the largest telecom operator in Africa, its struggles in Nigeria, often regarded as a prime example of a country in sub-Saharan Africa plagued by institutional voids and uncertainty, are well known (Abe, 2024). Other examples of project-based firms that failed in their expansion into Africa include Group Five, a South African construction company that went into business rescue in 2019, and the Trollope group, a private company known to the present researcher, which incurred

substantial financial losses as a result of business ventures into the Democratic Republic of the Congo and Guinea.

Aside from external factors such as weak institutions, corruption, regulatory uncertainty, or political risk, Mhonyera et al. (2020) note that businesses that have failed in Africa often made strategic mistakes. For example, including inadequate market research leads to a misinterpretation of the local culture and environment. Other common strategic errors include inadequate self-sufficiency and over-internationalisation, particularly when expansion is too aggressive (Mhonyera et al., 2020).

Notably, most large project-based firms operating in the region typically do so across multiple countries. Brock and Hitt (2024) note that firms that operate across geographically and institutionally diverse regions require more robust DCs to address the heterogeneity of the business environments. The development of these DCs may be further complicated by the nature of project-based work, which is inherently temporary and fragmented, and often involves multiple, contextually distinct projects. According to Teece (2018), DCs are underpinned by organisational routines and processes. The lack of stability and repetition, as well as the often-decentralised nature of a project-based firm, make it challenging to develop company-wide DCs (Pemsel & Söderlund, 2025). Considering this, it is reasonable to suggest that project-based firms operating successfully in sub-Saharan Africa may discover a way to develop not only a unique set of DCs, but also a distinct approach to creating them, compared to other multinational enterprises.

Despite the growing recognition of DCs' importance in international business, Brock and Hitt's (2024) review of DCs in international firms clearly illustrates a theoretical gap in understanding how firms develop and deploy these capabilities across institutionally diverse environments. Current research appears to have inadequately addressed the specific configurations of DCs required for different forms of international strategies, particularly in contexts characterised by institutional voids and environmental uncertainty. While researchers have identified certain meta-capabilities, which are fundamental capabilities dedicated to the development and creation of more specific DCs, the relationship between these capability levels remains poorly understood, especially in a context of variable cultural and institutional environments (Brock & Hitt, 2024). Research appears to lack precision

in capturing international dimensions and contextual influences that shape DC deployment and effectiveness.

This theoretical underdevelopment is particularly pronounced in emerging-market contexts, where firms must navigate often immature and complex institutional landscapes that may require capability configurations fundamentally different to those in stable, institutionally mature markets (Brock & Hitt, 2024). Consequently, our understanding of how DCs enable firms to navigate the institutionally fragmented environments, such as those found across sub-Saharan Africa, remains limited, creating both theoretical and practical gaps for international business research. These theoretical gaps remain particularly acute for project-based firms, whose temporary and fragmented operations across multiple countries create unique challenges to the development of DCs. While Brock and Hitt (2024) argue that geographically diverse firms require more robust DCs, the specific nature of these capabilities in PBS, particularly in the context of sub-Saharan Africa, remains unexplored.

For project-based firms to continue supporting the development of sub-Saharan Africa, targeted research must be conducted to identify the DCs that distinguish successful firms. The present research focused not only on what these DCs are, but also on how successful firms recognise or develop them. By contributing to the theoretical understanding of these DCs and exploring how they may have developed in this context, this research may provide insights that could inform other businesses and help them achieve success in sub-Saharan Africa. These insights could inform the creation of a more competitive business environment, ultimately reducing costs for clients and end users. Furthermore, such business environments could lead to an increase the inflow of foreign direct investment (FDI) into the region, as international firms may gain a better understanding of how successful business is conducted in the region, which consequently reduces the risks associated with expanding into these countries. A more competitive environment where international businesses are more willing to operate will ultimately promote economic development in the region.

The next section articulates the purpose of the present study.

1.2 PURPOSE STATEMENT

This study was aimed at addressing the existing research gap concerning the DCs developed by project-based firms operating in sub-Saharan Africa. As discussed by Teece (2018), DCs are theoretically rooted in organisational routines and stable processes, yet project-based firms operating across sub-Saharan Africa must develop robust DCs through inherently temporary and fragmented operations within diverse institutional environments. This presents a fundamental contradiction in the theory of DCs. Existing DC frameworks, developed primarily in stable institutional contexts, do not adequately explain how project-based firms successfully navigate the challenges of institutional voids that characterise sub-Saharan African markets while executing temporary projects. This research was also motivated by Andrews and Luiz (2024), who examined the DCs created by a business to address institutional voids in a particular sub-Saharan African country. However, their study was limited because it focused on only one company in one country.

While Brock and Hitt (2024) suggest that geographically diverse firms require more robust DCs, the authors note that current DC theory lacks an understanding of which specific DC configurations enable success in institutionally fragmented environments. Additionally, existing theory lacks consideration of specific contexts, and broad principles are applied to all international markets (Brock & Hitt, 2024). Therefore, the contextual relevance of the present research study in sub-Saharan Africa is apparent.

The purpose of this study was to explore whether project-based firms successfully operating in sub-Saharan Africa may have developed a distinct category of adaptive DCs, and how these capabilities might differ from traditional market-based DCs. This study aimed to understand how such firms develop capabilities within project-based work. Additionally, these environments are characterised by uncertainty and institutional voids, and business survival depends on the firm's ability to navigate this volatility (Brock & Hitt, 2024). Capabilities that might be classified as DCs in other contexts could be viewed as ordinary or fundamental capabilities here.

By exploring potential distinctive DCs and examining how these firms develop them, the present study contributes to DC theory by investigating institutional navigation capabilities across multiple countries. The study explored how project-based work may influence development, recognising that this influence could either facilitate or

constrain such processes. The study also explored what project-based firms can do to enhance their ability to develop capabilities.

By examining project-based firms operating across sub-Saharan Africa, this research sought to provide empirical evidence that may contribute to a more nuanced, context-specific understanding of DCs in underdeveloped markets characterised by institutional voids. Understanding these capabilities is critical not only for advancing international business theory but also for providing practical insights for strategic decision-making, investment planning, and sustainable project execution, ultimately contributing to firm-level success. More contextually and effectively designed business strategies could also help accelerate sub-Saharan Africa's infrastructure development and economic growth by attracting greater investment and creating more competitive business environments that ultimately benefit regional development outcomes. It is hoped that this study furthers the discourse on the distinctiveness of the DCs developed by project-based firms in sub-Saharan Africa and whether they might provide a competitive edge in other global areas with comparable economic, geographic, and market conditions.

Having established the practical and theoretical need for the study and defined the research objectives, the next chapter presents a comprehensive review of relevant literature. Chapter 2 reviews the body of current knowledge on DCs, project-based firms, and the institutional context of sub-Saharan Africa, identifying the gaps this research sought to address.

2. LITERATURE REVIEW

This chapter reviews extant literature on capabilities, followed by a review of the sensing, seizing, transforming triad. Subsequent sections discuss DCs in international context, distinguishing between metal DCs and strategic DCs. Thereafter, the discussion moves to theory and the environmental and institutional context of sub-Saharan Africa, followed by a detailed discussion on the organisational challenges faced by project-based firms.

2.1 CORE DCs FRAMEWORK

This section distinguishes between types of capabilities and what they entail.

2.1.1 DCs vs Ordinary Capabilities

In dynamic capabilities view (DCV) theory, the capabilities an organisation has can be classified as either dynamic or ordinary (Pitelis et al., 2025). Ordinary capabilities (OCs) help firms to do things correctly, while DCs are those that enable a firm to do things correctly at the right time. According to Teece (2018), OCs are the routine activities, administration, and governance that enable an organisation to pursue a defined set of core activities. They relate to the routine execution of existing activities and are sometimes known as operational or zero-order capabilities. Importantly, OCs are measurable, easily imitable, and can be learned from external sources or, in some cases, even outsourced (Li et al., 2025). Andrews and Luiz (2024) describe OCs as industry best practices. OCs are critical for a business to function in the present but, on their own, are not typically a sufficient source of long-term or sustained competitive advantage (Li et al., 2025). This is especially important in constantly changing environments like those in sub-Saharan Africa, where the current method of handling an institutional void may not be suitable in the near future.

Brock and Hitt (2024) define DCs as the skills that enable organisations to develop and adapt the competencies and resources needed to maintain competitiveness. DCs allow firms to respond to the changing demands of the external business environment (Andrews & Luiz, 2024). Teece (2023) emphasises that DCs are forward-looking and influence how organisations will operate in the future. Organisations with a future focus and strong DCs ensure that essential resources

are accessible and that the organisational structure is appropriate for functioning as intended.

Teece (2018) explains that DCs are easier to understand when viewed within the organisation's overall set of capabilities. This set of capabilities can be seen as comprising two levels: organisational capabilities (ie OCs) forming the foundation, and DCs above them, which can be divided into microfoundations and higher-order capabilities. Microfoundations, also known as low-order capabilities, are the processes, procedures, and individual actions that adjust and recombine a firm's existing OCs or create new ones (Pitelis et al., 2025). Microfoundations serve as mechanisms that enable the development of higher-order DCs (Teece, 2023). While microfoundations like OCs may be imitated by competitors, higher-order capabilities are more idiosyncratic and difficult for rivals to replicate (Teece, 2023). In other words, high-order capabilities embody the strategic ability to transform and evolve the organisation, while microfoundations or low-order capabilities serve as operational mechanisms that enable this transformative capacity. In the context of this research, for example, an organisation's high-order capability might be its ability to enter a market and subsequently adapt to that environment. Microfoundations refer to the specific individuals, processes, systems, and routines that facilitate market entry and adaptation.

Time represents an important conceptual distinction between DCs and OCs (Cavusgil & Deligonul, 2025). OCs are bound to the present, as they are essential to a firm's current existence and routine operations (Matysiak et al., 2017). OCs give a firm the ability to do things right and achieve immediate operational effectiveness (Pitelis et al., 2025). In contrast, DCs represent the firm's ability to sense change, seize opportunities, and reconfigure its OCs to address a changing work environment (Li et al., 2025). DCs are future-focused and are necessary to deliver sustained operational effectiveness (Teece, 2018). It is therefore clear that understanding how a business environment is expected to evolve over time is a crucial consideration in understanding DCs. Perhaps in a market that is expected to be stable for the foreseeable future, a firm might develop DCs that are more internally focused. In contrast, firms operating in markets that are inherently unstable and unpredictable might develop DCs that are more externally focused.

This literature illustrates that distinguishing between OCs and DCs may be complex. While the aim is to identify the capabilities that give project-based firms a competitive advantage, it is possible that challenges in operating within certain environments in sub-Saharan Africa may lead businesses to subconsciously prioritise survival in the present over maintaining a competitive edge. Successful businesses may be characterised by their ability to apply their OCs more effectively than their competitors, which contrasts with more stable environments, where DCs underpin success. This focus on survival, where businesses operate in a form of crisis management, may inhibit the higher-order thinking required to develop DCs. Furthermore, because research often focuses on project-based firms undertaking projects with a set timeframe, often shorter than a few years, there may naturally be a focus on the present rather than the future, which is a key feature of DSs.

The next section looks at a framework for DCs.

2.1.2 The Sensing, Seizing, and Transforming Triad

The Sensing, Seizing, Transforming triad (Teece, 2018), a fundamental framework for describing DCs (Li et al., 2025), clusters DCs into three major activities (Teece, 2023). The purpose of the triad is to summarise and simplify the multiple activities involved utilising DCs (Teece, 2023).

Teece (2018) describes the three core competencies represented in the triad as follows. Sensing competence involves recognising opportunities and threats. Seizing competence is the ability to address these opportunities and threats through essential investment and resource mobilisation. Transforming competence is the ability to sustain competitiveness by enhancing, safeguarding, and reconfiguring both tangible and intangible assets. Organisations that excel across these three clusters are better equipped than their competitors to detect emerging trends and hidden shifts (Schoemaker et al., 2018). They will secure stronger positions for future scenarios and react more swiftly as conditions evolve. Firms with well-developed DCs can maintain their edge through rapid innovation and distinctive business models.

2.1.2.1 Sensing

Pitelis et al. (2024) view the sensing competency as the starting point of DCs. Sensing is a firm's ability to utilise resources effectively when identifying and evaluating changes in the external environment (Andrews & Luiz, 2024; Joussem et al., 2025). The process of sensing helps firms determine where the market and environment are moving, setting the stage for all subsequent actions (Gupta et al., 2024). Sensing emphasises recognising the need for change; without this, the development of other DCs or adaptation is unlikely (Gupta et al, 2024).

To be effective, the sensing process relies on specific procedures and managerial skills. Strong peripheral vision, described as the ability to 'see around corners', reflects a firm's capacity to notice change before or when it begins (Schoemaker et al., 2018). This skill is vital because, in volatile and unpredictable markets, signals of major shifts can be very weak or initially undetectable. Another essential aspect of sensing is information-gathering, which is especially relevant in sub-Saharan African countries where accurate published data may be limited. In these environments, firms must collect intelligence through both informal and formal channels, including interactions with other businesses, customers, clients, and local sources (Andrews & Luiz, 2024).

Two additional sensing mechanisms are the ability to learn and retain knowledge, as well as managers' capacity to apply cognitive leadership and strategy, both of which enhance sensing. The former describes a firm's process of learning, accumulating experience, and managing that knowledge so that key decision-makers can collectively apply contextual and local insights at the strategic level (Brock & Hitt, 2024). This is particularly critical for businesses operating across multiple geographical jurisdictions, where decision-makers might not be adequately exposed to the various business environments. The latter mechanism describes the importance of leadership and managers' ability to anticipate information that could be paradigm-shifting (Schoemaker et al., 2018). Thus, leaders who can think critically beyond conventional wisdom and build networks to scan for peripheral knowledge are essential to a firm's ability to sense.

2.1.2.2 Seizing

Seizing is the second cluster of activities used to group DCs. It is a crucial phase in which firms act upon the opportunities or threats identified within the external environment during the sensing phase (Gupta et al., 2024). It is essentially about aligning resources and implementing strategy to capture or preserve value from the opportunities or threats (Joussen et al., 2025).

The ability to seize involves several key actions in response to sensed changes. The first is the ability to make decisions to address the opportunities or threats. Decisive management, guided by creative insight and intuition, is crucial to seizing opportunities (Teece, 2023). Decisive leaders can align divergent perspectives, often making decisions with incomplete information (Schoemaker et al., 2018). The ability to be decisive helps to clear the fog of uncertainty and allows others to embrace the change (Schoemaker et al., 2018). Second is the managerial competence to devise and refine business models. Finding the right model to suit the opportunity and deal with threats is as important as sensing that the threat or opportunity exists. This requires problem-solving qualities, as well as fundamental business characteristics like collaboration and innovation (Schoemaker et al., 2018).

The final crucial aspect of the ability to seize in DCV theory is the capacity to be agile and capable of resource allocation and -investment (Cavusgil & Deligonul, 2025). In other words, firms that seize opportunities or deal with challenges are able to make investments and mobilise the right resources to extract value from the opportunities and preserve value when faced with threats.

2.1.2.3 Transforming

Transforming (or reconfiguring) is the final cluster of activities in the DC framework. This core element describes the changes applied to the firm to capitalise on the opportunities and address the threats that were identified and strategised in the sensing and seizing activities (Teece, 2018). In a sense, this activity outlines the execution or implementation phase of the renewal and realignment of a company's resources and capabilities in response to a changing business environment (Gupta et al., 2024). This renewal and alignment allow firms to improve efficiencies and create better value for competitive gain (Brock & Hitt, 2024). The process of transforming aligns the resource base and strategy to allow for the continuation of

future sensing and seizing (Pitelis et al., 2024). The three activities of sensing, seizing, and transforming form an ongoing cycle of evolutionary adaptation (Zahra et al., 2022).

Several key aspects and considerations define the transformation process. Organisational structuring and redesign are essential elements of change. An organisational structure can be reconfigured to best address opportunities or threats. For example, shallower hierarchies and decentralised authority tend to make organisations more innovative and flexible; however, this could compromise control (Teece, 2018). Kurtmollaiev (2020) discusses in detail how the universal practice in the DC framework is to assume that senior management and owners are the only individuals in an organisation who have the right to influence organisational routines and change. Although this might be true in centralised organisations, evidence suggests that in decentralised organisations with flatter structures, innovation and flexibility are more likely to be observed (Kurtmollaiev, 2020).

Kurtmollaiev (2020) further argues that having more individuals with more influence, which is common in flatter structures, increases the likelihood that some individuals will have the intention to change. In contrast, in hierarchical organisations, the intention to change depends on only a few individuals at the top. Strong leadership is essential when implementing changes to an organisation, particularly if the changes are difficult or substantial (Teece, 2023). Leaders must be able to clearly articulate a vision and pursue both short- and long-term goals to drive these changes (Teece, 2018). The next section takes a look at DCs in international contexts.

2.1.3 DCs in International Contexts

In addition to some of the DCs described previously, several more specific DCs have been identified in international firms through research. Brock and Hitt (2024) classify DCs hierarchically into meta DCs and strategic DCs.

2.1.3.1 Meta DCs

Meta DCs are higher-order (often called third-order) capabilities that are considered essential for multinational enterprises (Brock & Hitt, 2024). These DCs, which enable firms to enrich existing DCs or create new ones, assist organisations to successfully operate subsidiaries across diverse geographical locations. Since subsidiaries

operate in different institutional environments, a specific DC that is effective in one market may need modification to better fit another environment. A firm with effective meta DCs will be able to make this adjustment more effectively (Brock & Hitt, 2024). Notable DCs are discussed below.

Agility, which is defined as an organisation's ability to renew itself and stay flexible without sacrificing efficiency, allows international businesses to respond rapidly to changes in business environments (Brock & Hitt, 2024). Research has indicated that the ability to mobilise resources and capabilities quickly, even if only partially, allows international businesses to gain a significant advantage. For project-based firms, who are often required to execute work on short notice, this ability may significantly influence their success. In fact, logic would suggest that, for project-based firms, the ability to respond swiftly is a prerequisite to survival, and is, therefore, an ordinary capability.

Building or upgrading is the ability to develop new capabilities from internal and external resources (Brock & Hitt, 2024). These resources include foreign contexts and local partnerships. In comparison to local firms, international businesses have significantly more contexts from which to draw knowledge and other resources for capability-building, theoretically providing them with a competitive advantage compared to firms that operate in a single market. Like agility, is it possible that this DC in project-based firms is also a pre-requisite for success, or an ability that gives certain project-based firm an advantage (Brock & Hitt, 2024).

Leveraging is the ability to deploy an existing resource or capability from one context to another (Brock & Hitt, 2024). This is considered a core ability for multinational enterprises to be able to replicate operational success across geographical contexts. International businesses lacking this ability would be unable to transfer their existing business practices to new jurisdictions, and would essentially have to start a new business, with new methods of creating value, in each jurisdiction (Brock & Hitt, 2024). For a business looking to expand into sub-Saharan Africa, this ability would be essential for success in the expansion.

Brock and Hitt (2024) also consider the capabilities of sensing, seizing, and transforming as meta DCs. While this contrasts slightly with Teece (2018), who views these capabilities as microfoundations of sustained enterprise performance, Brock and Hitt's (2024) classification builds on this classification by arranging them within

a hierarchical framework specifically designed for international research. In their framework, the effectiveness of these microfoundations is enhanced by the abilities of agility, building, and leveraging. Brock and Hitt (2024) effectively suggest that, although international businesses may possess the capabilities of sensing, seizing, and transforming, as well as the more specific DCs within this classification, they will not function effectively across multiple jurisdictions without the ability to be agile, build and leverage.

2.1.3.2 Strategic DCs

Brock and Hitt (2024) consider strategic DCs as capabilities influenced by meta DCs, which are, therefore, less dynamic. While meta DCs focus on enabling the development of other DCs, strategic DCs enhance a firm's competitiveness through the creation or development of lower-level OCs or resources. Strategic DCs are closer to a firm's operational needs, directly affecting its competitive profile. Brock and Hitt (2024) identify several core strategic DCs relevant to international firms.

Localisation is a firm's ability to adapt to global operations by tailoring its products and services to local contexts (Gölgeci et al., 2019). According to Brock and Hitt (2024), studies show that international firms that have invested in a local supply chain, developed local talent, collaborated effectively with local partners, and embraced local customs and incentive structures are more likely to succeed in the country. In their research, Gölgeci et al. (2019) found that localisation is positively correlated with success in emerging markets; however, it appears to be more important in countries with higher institutional development. Gölgeci et al. (2019) suggest that this is because, in countries with more developed institutions, where environments are more consistent and predictable, firms can leverage their adaptability to align their operations with clearer rules of the game. In other words, in the context of sub-Saharan Africa, where few countries can be considered institutionally stable, localisation may be more about survival and, therefore, more pragmatic and transactional. In stable environments, localisation helps firms to better adjust their internal resources, while in unstable environments, it may assist in understanding changes in external resources.

Ambidexterity is a firm's capacity to undertake multiple and sometimes conflicting tasks simultaneously yet effectively, which is a critical strategic DC for international

firms operating across multiple jurisdictions (Ochie et al., 2022). This is especially relevant for international firms, which may operate in diverse markets with varying conditions. Some stable business environments may require a firm to be in a state of exploitation, where the focus is on managing and refining existing resources and capabilities, while other environments might demand that the firm be in a state of exploration, actively seeking new business strategies (Brock & Hitt, 2024). Expansion across jurisdictional variation is likely to necessitate a balance between the two.

Strategic knowledge creation, also known as absorptive capacity, is a firm's ability to acquire, assimilate, and utilise knowledge from multiple international sources (Pitelis, 2024). Successful international firms can source and manage knowledge effectively by integrating it with existing knowledge and aligning it with evolving strategic objectives. Li et al. (2025) introduced the concept of dynamic knowledge management, which is a strategic integration of knowledge management with the DCs framework. Li et al. (2025) argue that dynamic knowledge management should be identified as an additional microfoundation, as it bridges the gap between higher-level DCs and their practical implications. In summary, improved knowledge management processes enable enhanced DC effectiveness.

Managing resources is as the ability to effectively and continuously create, combine, align, adapt, elevate, and protect critical resources, and is described by Zahra et al. (2022) as a key strategic DC of international firms. This ability allows firms to manage changing environments across geographically dispersed markets. This aligns with Brock and Hitt's (2024) description of resource management, which they define as an international firm's ability to manage its resource portfolio. Zahra et al. (2022) further emphasise the importance of this ability in international firms, conceptualising it as a 'meta-integrator' that orchestrates a firm's value creation across borders.

Additional strategic DCs include new product development or innovation and entrepreneurship (Brock & Hitt, 2024). New product development utilises learning processes to evaluate markets and technologies, helping firms to create new products, processes, and business models. Entrepreneurship involves proactive and risk-taking behaviours to discover and exploit opportunities across national

boundaries (Brock & Hitt, 2024). Despite its recognition as a critical DC for international firms, there appears to be a shortage of research in the area.

The next section reviews international theory in relation to context.

2.2 INSTITUTIONAL AND ENVIRONMENTAL CONTEXT

This section discusses institutional voids in emerging markets, with the subsequent section focusing on sub-Saharan Africa. This is followed by a discussion of the strategies and capabilities of firms in this context.

2.2.1 Institutional Voids in Emerging Markets

Andrews and Luiz (2024) define institutions as the embodiment of rules and structures that dictate a country's business environment. These institutions significantly influence market efficiency and can either foster a positive environment or hinder operations. Liedong et al. (2020) classifies institutions as formal or informal. Formal institutions typically represent the rules and regulations and associated legal and administrative structures that govern a country or society, while informal institutions represent the norms, values, and beliefs that characterise a society (Murithi et al., 2020). Examples of formal institutions include a country's judicial system and financial institutions, while an example of an informal institution is a culture's traditions or unique idiosyncrasies (Murithi et al., 2020).

Institutional weaknesses that increase business costs are known as 'institutional voids' (Andrews & Luiz, 2024). Liedong et al. (2020) describe institutional voids as the absence or ineffectiveness of market-supporting institutions that enable transactions within an economy. Although the term 'void' suggests that these institutions are absent, the term refers to underdeveloped institutions that hinder firms' ability to succeed. Although institutional voids may be present in all economies, they are particularly prevalent in emerging markets (Liedong et al., 2020). Typical institutional voids present in emerging markets include a lack of reliable market information, unpredictable regulations, inefficient courts, and cumbersome bureaucratic procedures.

Nason and Bothello (2023) distinguish between absent institutional voids, refer to the missing legal and market-supporting institutions found in high-income economies

(Nason & Bothello, 2023). Present institutional voids involve potential misalignments between informal and formal institutions (Murithi et al., 2020). Liedong et al. (2020) categorise institutional voids into three types: regulatory, cognitive, and normative. Regulatory voids are deficiencies in formal laws and regulations. Cognitive voids refer to the absence of shared thinking mechanisms and understanding, which are often taken for granted in society. Normative voids relate to the underdevelopment of societal values that guide acceptable behaviour (Liedong et al., 2020).

Liedong et al. (2020) note that the understanding of institutional voids in business research is evolving. Institutional voids are traditionally seen as the absence of institutions, but more recent perspectives describe environments with institutional voids as having high institutional complexity. In such settings, there are numerous, often conflicting, regulations and institutions (Liedong et al., 2020).

2.2.2 Sub-Saharan Africa's Institutional and Business Landscape

In sub-Saharan Africa, conducting business is notably costly and challenging, due to significant institutional voids (Boso et al., 2019). Additionally, as discussed by Adomako et al. (2024), the nature of these institutional voids can differ from one country to another within the region, complicating matters further. While these markets may not be intensively competitive, the difficulties of doing business still invoke characteristics typical in a competitive environment: instability, unpredictability, and constant change.

Murithi et al. (2020) discuss how sub-Saharan Africa's institutional environment has been shaped by its colonial past. Many countries still have bureaucratic, top-down systems where power and decision-making are concentrated amongst a few, who are often influenced by political ties and social hierarchies. Societies in sub-Saharan Africa are also affected by complex ethnic relationships, with some engaging in efforts to unify different groups while others are characterised by ongoing divisions and rivalries. Many of these nations attempt to maintain formal institutions aligned with Western economic policies while keeping their unique cultural beliefs. These historical and social factors have created a noticeable gap between countries' formal and informal institutions. As a result, institutions are weakened, leading to governance challenges and inefficiencies (Murithi et al., 2020).

Several typical formal institutional voids are common in sub-Saharan Africa. Corruption and a lack of rule of law undermine many of the formal institutions in the region (Adomako et al., 2024). Bribery, extortion, and kickbacks are often required to secure government contracts, permits, or licences, drastically distorting healthy market competition and firms' competitiveness. Businesses that are unwilling to engage in such activities are often at a distinct disadvantage compared to their counterparts that are. Furthermore, businesses that do engage in such activities often find that, once a precedent is set, it is no longer possible to operate without continuing to participate in these activities (Adomako et al., 2024).

Weak institutions often fail to protect property rights, contracts, and intellectual property, increasing the risk of expropriation and disputes for multinationals (Adomako et al., 2024). Compounding this is the ineffectiveness of legal systems, which prevents firms from redressing perceived injustices (Adomako et al., 2024).

Bureaucratic red tape and inconsistent regulation enforcement are also typical institutional voids in sub-Saharan Africa (Adomako et al., 2024). Businesses often face excessive paperwork and complex procedures that hinder or delay normal operations. Additionally, uncertainty regarding, and frequent changes to, regulations make long-term planning difficult, which could lead to unforeseen expenses (Games, 2011). This issue is closely linked to political instability, another common institutional challenge in sub-Saharan Africa (Adomako et al., 2024). Where firms rely on individuals within government, changes in leadership can create significant complications (Games, 2011). So, too, weak or disrespected institutions can result in a new government or minister altering regulations unexpectedly, potentially impacting firms' profitability. These unpredictable political dynamics generate considerable uncertainty for companies operating in sub-Saharan Africa, particularly those that have been forced to engage bureaucracy to remain competitive.

While the institutional voids mentioned above involve mainly intangible regulations, processes, and actions, their presence or absence often leads to tangible, physical gaps that could obstruct business activities in sub-Saharan Africa. Infrastructure deficiencies are a major obstacle to development and economic growth, significantly hampering the ease of doing business (Nkemgha et al., 2023). Common infrastructure issues in the region include unreliable or insufficient power supply; poor road, rail, and air networks that make logistics difficult and costly; and limited

information and communication infrastructure, which hampers the adoption of digital technologies (Adomako et al., 2024; Asongu & Odhiambo, 2020).

Additional voids characterising many countries in the region include the inability to access finance, currency volatility, and a lack of accurate information and data about the market. Banking systems in the region remain underdeveloped, resulting in high transaction costs and significant difficulties in accessing credit and insurance (Asongu & Odhiambo, 2020). Many countries have currencies that are highly volatile and susceptible to major fluctuations, which, when combined with an inability to access or transact in foreign exchange, often due to strict controls, leads to the preservation of business value becoming extremely challenging (Games, 2011). This situation is further worsened by the absence of reliable market data, which limits informed decision-making (Liedong et al., 2020).

Finally, many sub-Saharan Africa countries face shortages in human capital and labour resources. These nations often lack high-quality, accessible skilled personnel and clear labour standards. As Wang et al. (2022) note, this situation forces firms to either train or import services and skills, which raises transaction costs. Additionally, it hampers collaboration and specialisation, complicating efforts to localise supply chains (Wang et al., 2022).

2.2.3 Strategy and Capabilities of International Firms in Sub-Saharan Africa

Research shows that firms adopt various strategies to overcome gaps and challenges in sub-Saharan Africa's business environment. Mhonyera et al. (2020) observe that many multinationals in the region are more risk-averse compared to those in other areas. These companies evaluate their chances of success and potential risks, often opting not to invest if obstacles seem too great. Firms increasingly consider partnerships and alliances as an attractive way to enter a new market (Mhonyera et al., 2020). This enables them to gain skills and local insights into business culture, competitors, and opportunities with less time and financial investment. Local partnerships can also help firms establish political ties, providing a channel of appeal when unreasonable regulations are introduced (Games, 2011). Alternatively, if companies prefer not to get involved in politics directly, partnering with a local entity could also protect them from political influence. Another common risk

mitigation strategy in sub-Saharan Africa is to follow larger multinational clients, a phenomenon known as the 'drag effect' (Games, 2011). This strategy allows smaller firms to reduce their exposure by leveraging the influence and resources of larger, more established companies (Games, 2011).

While all these entry-mode strategies are viable options for project-based firms operating in sub-Saharan Africa, each has its own advantages and disadvantages (Oguji & Owusu, 2021). A risk-averse approach may increase the likelihood of project success, but it may also limit expansion and growth. Local partnerships or joint ventures could offer many benefits; however, they also carry significant risks (Oguji et al, 2021). Selecting the right partner is crucial, as partners must share values and objectives (Oguji et al, 2021). Partners with conflicting aims may lead to disputes over managerial control, negatively impacting performance (Oguji et al, 2021). Partners need to trust each other; otherwise, agreements can become complex, increasing costs and reducing flexibility (Oguji et al, 2021). Another way to enter is to follow a larger client into a country. While this may shield a company from local challenges, it can also hinder the company from recognising opportunities or understanding the market (Agnihotri et al, 2023). When the client leaves, the company might find itself unable to operate there as effectively as before.

Andrews and Luiz (2024), in exploring the key capabilities South African multinational enterprises need to operate successfully in sub-Saharan Africa, outline three levels of capabilities vital to navigating environments with institutional voids. The foundational level involves addressing infrastructure gaps stemming from weak or missing institutions, such as setting up independent power sources or enhanced security measures. OCs include best practices for managing legislative challenges, like operational planning, governance, anti-corruption codes, and flexible working capital strategies to handle currency volatility and supply chain disruptions. DCs allow firms to sense, seize, and reconfigure resources amid uncertain and volatile environments. These include learning and knowledge management to leverage experience from similar contexts across sub-Saharan Africa, relationship-building skills for collaborating with local partners and stakeholders, and reconfiguring capabilities such as deploying troubleshooting teams and creating flatter organisational structures for agile decision-making (Andrews & Luiz, 2024).

The next section focuses on project-based firms and the organisational challenges they face.

2.3 PROJECT-BASED FIRMS AND ORGANISATIONAL CHALLENGES

This section commences with a description of a project-based firm, followed by a discussion of these firms' DCs.

2.3.1 Nature of Project-based Firms

Project-based firms are organisations that generate value and profit through the execution of projects (Denicol & Davies, 2022). Project-based firms organise most of their internal and external activities into projects, with their capabilities and structures designed to support project co-ordination (Manning, 2017). Projects may be unique services or products tailored to meet specific customer needs (Barbosa & Carvalho, 2024). Hermano and Martin-Cruz (2020) define a project-based firm as one in which project capabilities shape the project management processes and the organisation's external and internal competencies.

Project-based firms can range from large organisations with a project-focused structure to smaller organisations that employ only managerial staff and rely on external sources of creative and technical services (Manning, 2017). According to Manning (2017), a key characteristic of project-based firms is hierarchical control, in which they use formal authority established through employment contracts to direct how tasks are organised and carried out. These firms also have co-ordination capacity, which is the critical resources and capabilities to regularly initiate and manage new projects. Manning (2017) further notes that these businesses often engage in interorganisational projects, where they rely on multiple external resources in the form of suppliers, partners, and consultants.

A distinctive aspect of project-based firms is their potential to utilise multiple business models (Løbner, 2022). Although the overall business model generally follows a top-down approach from firm-level strategies, individual projects might operate autonomously, influenced by their environment and specific contracts. This creates a scenario where multiple business models can coexist, and also allows for a bottom-up influence, as these projects can shape or even transform the existing model, or introduce entirely new approaches (Løbner, 2022).

Project-based firms exist because clients often prefer not to take on the risks associated with resourcing large capital projects (Denicol & Davies, 2022). Furthermore, a project-based firm might offer a specialised project or service that supplements a client's internal capabilities. Project-based firms are effective at responding to changing client needs, giving projects flexibility and agility (Gemünden et al., 2018). These firms make it their core business to deliver specific services or products by integrating diverse bodies of knowledge and skills (Denicol & Davies, 2022; Gemünden et al., 2018). This is especially important in sub-Saharan Africa, where the needed skills and expertise might be deficient.

In the context of this study, project-based firms operating in sub-Saharan Africa include companies that may offer services in engineering, procurement, construction management, renewable energy development, mining, and information and communications technology (Choi et al., 2018; Manning, 2017).

2.3.2 DCs in Project-based Firms

Project-based firms often operate in industries characterised by uncertainty, environmental challenges, and product complexity (Hermano & Martin-Cruz, 2020). The ability to adapt to these dynamic environments by deploying capabilities to exploit opportunities, neutralise threats, and achieve evolutionary fitness often determines business success. When investigating capabilities in project-based firms, it is important to distinguish clearly between operational capabilities, which allow a firm to pursue a project programme efficiently, and DCs, which are used to change or reconfigure operational routines and capabilities (Denicol & Davies, 2022; Hermano et al., 2022). In addition, Denicol and Davies (2022) highlight the need to distinguish DCs across two interrelated levels: the temporary project level, which enables project managers to respond to changes during the project, and the permanent organisational level, where top management can assess the performance of project-level processes and identify transferable experiences for future projects. The permanent organisational level brings into play the temporary–permanent dilemma, the challenge that project-based firms face in building knowledge to manage multiple projects over many years (Denicol & Davies, 2022). This knowledge, which needs to become embedded learning in the permanent organisation, must be gained from delivering unique and temporary projects. Hermano and Martin–Cruz (2020) argue that the correct DCs help address this by

facilitating knowledge transfer and key learnings to subsequent projects, which prevents knowledge loss when these temporary projects are completed.

Hermano et al. (2022) explored how each element of the sensing, seizing, transforming triad (Teece, 2018) influences the development of DCs in project-based firms, providing a theoretical framework for this process, both at project- and organisational level. According to their research, at the project level, sensing capabilities allow firms to monitor and analyse conditions in order to identify new opportunities and threats. This process involves recognising changes in project scope, stakeholder behaviour, and the business environment, supported by systematic information-gathering throughout the project's lifecycle. Seizing capabilities encompasses planning and decision-making routines that enable project-based firms to address identified opportunities or threats through structured approaches. These include assessing the impact on project scope, establishing change management policies, and designing action plans. Finally, transforming capabilities help facilitate the implementation of the changes identified in the sensing and seizing by modifying scope, updating project plans, and reconfiguring project activities. This ensures alignment between project capabilities and broader organisational goals (Hermano et al., 2022).

At the organisational level, Hermano et al.'s (2022) research indicates that project-based firms must develop standardised routines that transcend individual projects in order to build sustainable competitive advantage. Sensing involves recognising and gathering important knowledge from both finished and ongoing projects, evaluating current project skills in relation to future demands, and continually monitoring the environment for potential opportunities and threats. Choi et al.'s (2018) research on global construction firms revealed that effective sensing strategies also include geographic and business model diversification to explore varied markets and market segmentation.

Technological innovation for discovering new project execution methods is also a common DC in construction firms. However, its effectiveness or relevance in immature markets with infrastructure gaps requires further research. Seizing at an organisational level involves strategic decision-making about which opportunities to pursue and how to prioritise specific projects within a project-based firm's portfolio

(Hermano et al., 2022). Additionally, seizing includes identifying which project-level capabilities should be formalised and elevated to organisational capabilities.

Choi et al. (2018) demonstrate that successful project-based firms implement decentralised organisational structures with region-based management systems that respond rapidly to local market- and cultural needs, allowing business units to operate independently rather than through centralised control. Transforming capabilities enable project-based firms to reconfigure assets and routines, embed project learning into organisational knowledge, and prevent rigidity or path dependency that hinders adaptability (Hermano et al., 2022). According to Choi et al. (2018), vertical chain integration that systematically links assets and capabilities across business units enhances project productivity and improves resource efficiency. Together, these DCs enhance project-based firm's ability to respond to uncertainty and market shifts, helping them maintain a competitive edge in evolving environments.

The literature review identified significant gaps and potential contradictions in the understanding of how DCs function within project-based firms operating across sub-Saharan Africa's unique institutional landscape. Building upon this critical analysis of existing literature, Chapter 3 articulates the specific research questions that guided this empirical investigation and address these identified gaps.

3. RESEARCH QUESTIONS

This chapter presents the research questions, specifying their focus, and provides a rationale for each research question.

3.1 List of Research Questions

The present study was guided by three research questions (RQs), listed and discussed below.

RQ1: Which DCs enable project-based firms to sustain operations across multiple sub-Saharan African countries characterised by institutional voids?

RQ2: How do project-based firms develop, deploy, and transform these DCs capabilities from temporary project-level learning into lasting firm-level capabilities, given the temporary and fragmented nature of project-based work?

RQ3: To what extent do capabilities traditionally classified as dynamic in stable institutional contexts function as ordinary or foundational capabilities in sub-Saharan African markets?

Although there is some research on the DCs that characterise project-based firms, studies specifically in business environments characterised by institutional voids are limited, particularly in the context of sub-Saharan Africa. These research questions aim to address this gap.

RQ1 addressed the core theoretical gaps regarding DCs in project-based firms operating across sub-Saharan Africa. RQ2 and RQ3 enable a more nuanced exploration of the contextual mechanisms, geographical variations, and capability-development processes.

3.2 Rationale for Each Research Question

RQ1: Which DCs enable project-based firms to sustain operations across multiple Sub-Saharan African countries characterised by institutional voids?

While Teece's (2018) DC framework is well contextualised in stable markets, its applicability in environments characterised by institutional voids remains underexplored. The question designed to address this gap is appropriate because of its wide geographical scope, which encompasses countries from West, East, Central, and Southern Africa, and is essential for providing the broad context needed to tackle this question effectively. This extensive coverage ensures proper representation of sub-Saharan Africa and highlights the institutional gaps typical of the region.

RQ2: How do project-based firms develop, deploy, and transform these DCs capabilities from temporary project-level learning into lasting firm-level capabilities, given the temporary and fragmented nature of project-based work?

This question arose from theoretical tensions identified in the literature review, particularly the contradiction between DC theory's foundation in organisational routines and stable processes (Teece, 2018) and the inherently temporary and fragmented nature of project-based work (Denicol & Davies, 2022; Hermano & Martin-Cruz, 2020). Building on this, the question is designed to address how organisational mechanisms help firms convert project-level learning into consistent, firm-wide sources of advantage.

RQ3: To what extent do capabilities traditionally classified as dynamic in stable institutional contexts function as ordinary or foundational capabilities in sub-Saharan African markets?

The question arose to address the gap in understanding of how capability classifications might differ in contexts characterised by institutional voids (Andrews & Luiz, 2024; Brock & Hitt, 2024), compared to stable institutional contexts in which DC frameworks are originally developed. This question challenges whether capability classifications developed in stable markets remain valid in sub-Saharan Africa, where institutional voids and complexity may raise the threshold for what constitutes a DC.

The guiding theoretical assumption behind this research is that project-based firms successfully functioning across multiple sub-Saharan African jurisdictions have developed a fundamentally different set of DCs that: (1) operate at a higher level to manage institutional heterogeneity rather than specific market conditions, (2) utilise project temporality as an enhancer rather than an obstacle to capability development,

and (3) redefine the distinction between DCs and OCs so that adaptability itself becomes an OC, while the capacity to co-ordinate learning across varied projects and institutional contexts constitutes the real DC. Chapter 4 details the methodology that was followed in conducting the study.

4. RESEARCH METHODOLOGY

This chapter discusses the methodology employed in conducting the study, starting with the study's research philosophy. This is followed by details on the research approach, the research design, and the methods employed to select participants from the study population, gather data, and analyse the data. The chapter concludes with the strategies employed to ensure rigour and the research ethics that were upheld throughout.

4.1 PHILOSOPHY

This present study was based in an interpretivist research philosophy, as the aim was to explore subjective meanings individuals attach to concepts and events (Creswell & Poth, 2016). The primary purpose of interpretive research is to understand behaviour, rather than to predict it (Harrison, 2013).

4.2 RESEARCH APPROACH

The study followed a qualitative research approach, in which data is gathered in the form of texts (amongst others) rather than numerical data (Saunders & Lewis, 2018). This approach was considered appropriate because little is known about the DCs of project-based businesses operating throughout sub-Saharan Africa, which required a detailed, contextual information that quantitative methods are unable to uncover (Brock & Hitt, 2024; Saunders & Lewis, 2018).

4.3 RESEARCH DESIGN

The present study followed an exploratory design, which is suitable for domains or topics that are poorly understood and have received insufficient research attention (Saunders & Lewis, 2018). This design was considered appropriate due to gaps in the literature and scant research attention to the DCs of project-based businesses operating in sub-Saharan Africa (Ochie et al., 2022; Rashid et al., 2019). Exploratory research is aimed at gathering preliminary data and identifying themes.

4.4 APPROACH TO THEORY DEVELOPMENT

The research followed an inductive approach in the data analysis, thus focusing on detail in the data in order to develop higher-order concepts. Theory development followed a deductive approach, where concepts were related back to information contained in the data (Creswell & Poth, 2016; Saunders & Lewis, 2018).

4.5 METHODS

This section describes the research population and the methods employed in sampling, data collection, and data analysis.

4.5.1 Population and Sampling

A study population is all units of analysis of interest to a researcher in a particular study, while sampling is the selection of members of the population for inclusion in the study (Saunders & Lewis, 2018). The present study's population comprised leaders in decision-making positions in projects-based firms operating in sub-Saharan Africa.

Participants were selected using purposive sampling, also called 'judgement sampling', which is a form of non-probability sampling, which means not every member of the population has an equal chance of being selected for participation in the study (Creswell & Poth, 2016; Rahman, 2023). In purposive sampling, participant selection is performed according to the researcher's judgement of an individual's ability to contribute meaningful data (Abutabenjeh & Jaradat, 2018; Rahman, 2023). Since the present researcher works for a project-based firm operating across sub-Saharan Africa and has access to a diverse network of leaders in the domain under study, the study was able to access participants deemed suitable.

The purposive sampling was complemented with snowball sampling, where the researcher obtains referrals from participants for additional potential participants (Johnson et al., 2020; Rahman, 2023). To avoid a homogenous sample, the researcher carefully selected firms that offer different services or produce different products. Although the participants' firms had to be based in the construction, engineering, or mining and resources industries, since these industries are more likely to allocate substantial resources to project execution and are thus more

vulnerable to a country's institutional voids, effort was made to select firms that represented diversity across these sectors. Only participants from companies engaged in short-term projects or contract-based work in at least three sub-Saharan African countries were included.

To ensure the selection of participants able to contribute rich, high-quality data, the present researcher, as recommended by Bouncken et al. (2025) also set the criterion of participants occupying a managerial or decision-making role. While capabilities are likely to be employed across all levels of an organisation, individuals in managerial roles are more inclined to utilise DCs rather than operational capabilities. Moreover, the researcher reasoned that managers are typically more experienced across various projects and jurisdictions that may have faced different challenges and, consequently, employed different DCs.

The realised sample comprised 13 participants from seven project-based firms, which is an acceptable sample size for a qualitative study (Saunders & Lewis, 2018). In qualitative research, sample sizes are generally smaller than those employed in quantitative research, as the aim is to in-depth information on the topic under study (Bouncken et al., 2025; Johnson et al., 2020). The sample size was determined by data saturation, which is the point at which additional data collection and analysis yield no new insights (Rahman, 2023).

4.5.2 Data Collection

In line with the interpretivist philosophy and qualitative research approach, primary data were gathered using semi-structured interviews (Saunders & Lewis, 2018). Primary data are 'new' data collected for the specific purposes of a study, whereas secondary data are data collected by other researchers for another research purpose.

A significant advantage of the interview method is the ability to modify the style and pace of the interview and the order of the interview questions to evoke the most fruitful responses from participants (Qu & Dumay, 2011). The researcher has the opportunity to build rapport with the participants in order to encourage them to feel comfortable responding in their own words, with the aim of eliciting authentic and nuanced insights (Dunwoodie et al., 2023). Honest responses assist the researcher in unearthing more human aspects of the participants, which may give insights into

behaviour and motivation (Qu & Dumay, 2011). Semi-structured interviews also allow the interviewer to ask probing questions in order to glean more detail and clarity on a participant's perspective (Qu & Dumay, 2011).

All the interviews were conducted in person. Alam (2021) explains that an interview that is taken personally is a more effective way to stimulate personal responses. There is also a lower likelihood of confusion related to the questions, which decreases the potential for ambiguity in responses. The present researcher used an interview guide (see Appendix A), comprised of open-ended questions, to ensure all questions were posed to all participants, and that the discussions did not stray from the research topic (*cf.* Andrews & Luiz, 2024; Mhonyera et al., 2020).

As recommended by Dunwoodie et al. (2023), a pilot or test interview was conducted with a participant to ensure that the questions and the language used were clear and appropriate and that the questions were comprehensive with regard to the research topic. The pilot interview also helped identify potential misunderstandings that could lead to inconsistent interpretations of interview questions.

Informed by the research questions, the aspects of the study topic covered by the interview questions are listed below, together with examples of questions.

- Company and person context: Describe the company's operations and what types of projects it executes in sub-Saharan Africa. What role do you play in the company?
- DC—sensing: How does the firm identify and respond to new opportunities and threats in the environment in which it operates?
- DC—seizing: How does the firm act on identified opportunities and threats, and what challenges are faced in mobilising resources to do so?
- DC—transforming: How has the firm transformed or adapted its internal processes in response to changes or disruptions in the external environment?
- Temporary—permanent dilemma: How does the company retain and transfer knowledge from completed projects to future work?

- Institutional voids and regional adaptation: What challenges has the company experienced working across sub-Saharan Africa, and how has the company adapted in response?
- Human capital and -resource development: How does the firm build and develop the skills and capabilities necessary for success in its operating environments?
- Reflections and strategic outlook: What capabilities set the company apart, and what capabilities will need to be developed for the firm to remain competitive?

All interviews were audio-recorded, with the participant's permission, and the researcher also took notes during the interview. All the recordings were transcribed into a digital format using Otter.ai and combined with the notes taken during the interviews.

4.5.3 Data Analysis

The data were analysed using thematic analysis, following an inductive approach, which is a bottom-up process whereby the analysis moves from particulars to more general perspectives and patterns (Creswell & Poth, 2016; Lester et al., 2020). The initial coding of the data was performed using Atlas.ti, a software package widely used in qualitative data analysis, while formulating the higher-order categories and themes was performed manually, to ensure nuanced findings were captured (Creswell & Poth, 2016). Based on the work of Braun and Clark (2006) and Lester et al. (2020), the following steps were taken in analysing the interview transcripts.

Step 1. Familiarisation: The researcher read the transcripts numerous times in order to become familiar with the information contained in the data.

Step 2. Coding: In this step, meaningful words and phrases were highlighted, ensuring that these were related to the study's overall aim. The researcher also made preliminary notes on meaningful information, referred to as 'memoing'.

Step 3. Collating codes into categories: In this step, the identified codes were grouped according to relevance under categories.

Step 4. Developing themes: This step entails crystalising related categories into overarching themes.

Step 5. Refining and labelling themes: In this step, the researcher refined the emergent themes by ensuring the themes and their categories represented the information contained in the data. Each theme was then given a concise, descriptive label (Braun & Clark, 2006; Lester et al., 2020).

The subsequent sections detail the study's time horizon, followed by discussions of the strategies employed to ensure the trustworthiness of the study and the ethical principles that were upheld throughout.

4.6 TIME HORIZON

Research can be conducted following either a cross-sectional or a longitudinal time horizon. In cross-sectional research, data are gathered and analysed at a particular point in time, providing a single view of the phenomenon under study (Saunders & Lewis, 2018). In longitudinal research, data are gathered and analysed over an extended period in order to enable comparisons and identify developments over time (Saunders & Lewis, 2018). Due to time constraints, the present study followed a cross-sectional time horizon.

4.7 TRUSTWORTHINESS

The rigour or trustworthiness of a qualitative study is determined according to the criteria of credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985). Credibility refers to the level of confidence the reader has in the truth of the findings, and the related strategies include member-checking, data triangulation, and prolonged engagement with participants. Dependability refers to consistency in the application of a rigorous and appropriate research methodology, including how the findings were derived. Dependability is also enhanced by providing a detailed description of the methodological choices, making the process 'auditable'. Confirmability is the extent to which the findings are free from researcher bias, which is enhanced by the researcher remaining aware of the possible influence of personal biases throughout the study. Transferability refers to the reader being able to judge whether the findings may be applicable in a different context, which requires thick descriptions of the study aims, the setting, and the research participants.

In the present study, the following strategies were employed to ensure trustworthiness. The researcher engaged in prolonged interviews with participants, to ensure their data provided in-depth information on the study topic, to the point of data saturation (Alam, 2021). In interpreting the data, the researcher practised reflexivity to ensure objectivity, i.e., that preconceived notions did not influence the findings (Johnson et al., 2020). The researcher also employed peer-debriefing by discussing the findings with the study supervisor, to ensure these were free from bias in the interpretation. The researcher used member-checking in the form of a review of the interview transcripts by participants to confirm their accuracy. The findings are supported by verbatim quotations from the interview transcripts. Finally, the report discusses the methodology in detail, allowing the reader to judge the process. The detailed descriptions of the study setting and participants allow readers to judge whether the findings may be applicable in another context (Lester et al., 2020).

4.8 ETHICAL CONSIDERATIONS

Saunders and Lewis (2018) define research ethics as the standards of behaviour that guide the moral choices researchers make. Ethical standards are particularly important in research involving human participants, and the researcher primary concern is participants coming to harm (Creswell & Poth, 2016; Johnson et al., 2020). The ethical principles upheld throughout the study are discussed below.

Ethical clearance to conduct the study (see Appendix B) was obtained from GIBS's research ethics committee, and the institution's ethics regulations were adhered to throughout the study. Participants were fully informed of the aim of the study and what their participation would entail. They were also informed that the data would be used for academic purposes, including publication of the findings. All participants had to sign an informed consent form (see Appendix C) prior to commencement of the interview, in which they also gave permission for audio-recording of their interview, as advised by Creswell and Poth (2016).

Participants were assured of anonymity and that participation was voluntary. Participants were not remunerated for participation and were informed that they could withdraw from the study at any point, without negative consequences, as recommended by Creswell and Poth (2016). The present researcher made sure that

no personal identifiers were used in the reporting, and replaced participants' names with a participant number.

This chapter discussed the study methodology, commencing with the interpretivist research philosophy in which the study was based. Subsequent sections detailed the qualitative research approach and the exploratory design. This was followed by descriptions of the purposive and snowball sampling methods employed to select a sample, the use of semi-structured interviews to gather the data, and the steps taken in the inductive thematic analysis. The subsequent sections described the study's cross-sectional time horizon, the strategies employed to ensure academic rigour, and the ethical considerations that were considered pertinent to the study. The next chapter reports the findings of the study.

5. FINDINGS

This chapter presents the findings of the study, commencing with a description of the sample and the method of data analysis.

5.1 PARTICIPANT PROFILE

The sample included Francophone, Anglophone, and Lusophone countries, representing the three main colonial languages in sub-Saharan Africa. This is important because colonial legacy may have influenced the current business environments and institutional gaps in sub-Saharan Africa creating differences between these linguistic groups (Murithi et al. ,2020). All participants represented firms that had operated in at least three sub-Saharan Africa for a significant period, demonstrating their ability to manage regional and institutional challenges. The firms were involved in resource-intensive, project-based work requiring substantial capital and resources, often deployed temporarily, which made them sensitive to the conditions this research aimed to explore. All participants were in senior-management or executive roles with strategic oversight across multiple jurisdictions and had managed numerous projects. A number of participants had experienced project failure in sub-Saharan Africa, and also had experience of projects in South Africa, a jurisdiction often regarded as more stable than other sub-Saharan African countries (Games, 2011). Table 5.1 provides details of the participants.

Table 5.1

Participant profile, including Sector, Company Services, and Position

| Interview | Participant | Company | Sector/Industry | Description of Services/Product | Position | Interview Date |
|-----------|-------------|---------|--|---------------------------------|--|----------------------------|
| 1 | 1 | Firm 4 | Mining and Resources | Opencast Mining Contractor | Group Operations Director | Wednesday, 27 August 2025 |
| 2 | 2 | Firm 1 | Mining and Resources | Underground Mining Contractor | Managing Director | Thursday, 28 August 2025 |
| 3 | 3 | Firm 1 | Mining and Resources | Underground Mining Contractor | Chief Operations Officer | Thursday, 28 August 2025 |
| 4 | 4 | Firm 4 | Mining and Resources | Opencast Mining Contractor | Managing Director | Thursday, 28 August 2025 |
| 5 | 5 | Firm 3 | Engineering, Infrastructure and Construction | Construction Company | Managing Director West Africa | Monday, 01 September 2025 |
| 6 | 6 | Firm 3 | Engineering, Infrastructure and Construction | Construction Company | Managing Director Africa | Monday, 01 September 2025 |
| 7 | 7 | Firm 7 | Mining and Resources | Explosives Supplier | Director of sales and mining services Africa | Monday, 01 September 2025 |
| 8 | 8 | Firm 6 | Mining and Resources | Opencast Mining | Head of Legal and Commercial | Tuesday, 02 September 2025 |
| 9 | 9 | Firm 5 | Engineering, Infrastructure and Construction | Construction Company | Chief Executive Officer | Friday, 05 September 2025 |
| 10 | 10 | Firm 2 | Mining and Resources, Engineering | Specialised Service Provider | Business Development Manager Africa | Monday, 08 September 2025 |
| 10 | 11 | Firm 2 | Mining and Resources, Engineering | Specialised Service Provider | Projects Manager | Monday, 08 September 2025 |
| 10 | 12 | Firm 2 | Mining and Resources, Engineering | Specialised Service Provider | Strategic and Analytical Market research Analyst | Monday, 08 September 2025 |
| 11 | 13 | Firm 5 | Engineering, Infrastructure and Construction | Construction Company | Group Risk Manager | Tuesday, 09 September 2025 |

A total of 11 interviews were conducted with 13 participants. One interview included three participants from the same firm, who were interviewed simultaneously. The

participants held senior positions in their organisations, including directors, chief executive officer (CEO), chief operations officer (COO), regional manager, project manager, business development manager, group risk manager, head of legal and commercial services, and strategic and market research analyst. All participants contributed to their firms' overall strategy and decision-making. Participants' employing companies included two opencast contract mining firms, which operate under three- to five-year contracts, which require substantial capital and resource deployment. These companies are often exposed to institutional voids typical of the political and bureaucratically charged mining sector (Mandishekwa, 2021). Two firms operated in construction across various industries, such as power, water, roads, and data infrastructure. The remaining two provided niche services and products to the mining and resources sectors. The countries in which the participants' employing companies were active and those of which the participants had experience are listed in Table 5.2.

Table 5.2

Geographic Distribution of Operations and Experience of Participants

| Interview | Participant | Company | Countries of Current Operations | Countries of Recent Experience |
|-----------|-------------|---------|--|---|
| 1 | 1 | Firm 4 | South Africa, Botswana, Namibia | DRC, Zambia, Guinea, Zimbabwe |
| 2 | 2 | Firm 1 | South Africa, Botswana, Zambia, Ghana | Burkina Faso, Mali, Guinea, Tanzania |
| 3 | 3 | Firm 1 | South Africa, Botswana, Zambia, Ghana | Zimbabwe |
| 4 | 4 | Firm 4 | South Africa, Botswana, Namibia | Ghana, Angola, Nigeria, DRC, Guinea, Mozambique, Malawi, Tanzania, Rwanda |
| 5 | 5 | Firm 3 | Ghana, Liberia | Guinea, Sierra Leone |
| 6 | 6 | Firm 3 | Ghana, Lesotho, Eswatini, Zambia | Mozambique, Botswana |
| 7 | 7 | Firm 7 | Zambia, South Africa, Namibia, Botswana, Lesotho | |
| 8 | 8 | Firm 6 | South Africa | Mali, Zambia, Tanzania, Burkina Faso, Botswana, RSA, Guinea, Senegal |
| 9 | 9 | Firm 5 | South Africa, Eswatini, Botswana, Zambia, Namibia, Malawi, Zimbabwe, Mauritius | Kenya, Tanzania, Rwanda, Guinea |
| 10 | 10 | Firm 2 | South Africa, DRC, Botswana, Tanzania, Sierra Leone, Niger, Zambia | Burkina Faso, Angola, Zimbabwe, Liberia |
| 10 | 11 | Firm 2 | South Africa, DRC, Botswana, Tanzania, Sierra Leone, Niger, Zambia | |
| 10 | 12 | Firm 2 | South Africa, DRC, Botswana, Tanzania, Sierra Leone, Niger, Zambia | |
| 11 | 13 | Firm 5 | Angola, Mozambique, Namibia | |

A total of 27 sub-Saharan Africa countries were discussed by the participants, with participants noting having had direct experience of operations in 24.

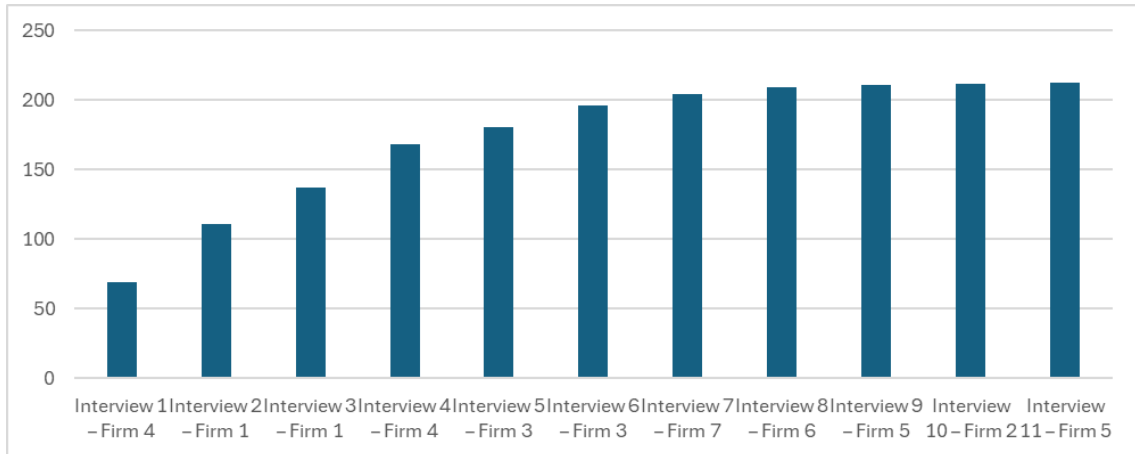
5.2 DATA COLLECTION AND ANALYSIS

The interviews took place over 13 days, from August 27 to September 9, 2025. The duration of the interviews ranged from 28:55 minutes to 66:27 minutes, an average

of 48:55 minutes. The simultaneous collection and analysis of the data was iterated until data saturation had been achieved, as illustrated in Figure 5.1.

Figure 5.1

Cumulative Unique Codes with Interview Progression



As noted in Chapter 4, the data was analysed using thematic analysis, described below.

5.2.1 Coding

Coding was performed using Atlas.ti's *Intentional AI coding* feature, which yielded 1 493 codes, which were subsequently refined to 212 codes by collapsing codes representing similar or overlapping concepts. For example, client-related codes such as “client alignment”, “assessment”, and “engagement” were combined into one code: “client management”. Table 5.3 presents an example of the coding process.

Table 5.3

Example of Coding in Atlas.ti

53 Speaker 2
 54 You get the contract manager, production guy, and an HR guy to go and do the feeling out on the ground as to what happens there. And a lot of it was just talking to expats in country as well, pubs, things like that. You You learn a lot there. You learn a lot more there than you do at the site visit some days. Yeah, absolutely okay. That's what it was. So that was interesting. Yeah, that's quite
 55 Speaker 1

1:17 You get the contract manag...
 ◆ Capability Development (RQ2): Informal Learning
 ◆ Capability Development (RQ2): Local Knowledge
 ◆ Capability Development (RQ2): Team Management

As noted earlier, the present researcher also engaged in memoing while coding the data, noting patterns of interest in the data. A summary of these notes is provided in Table 5.4.

Table 5.4

Summary of Researcher's Memos

| Area of Interest | Initial Observations |
|--|--|
| Risk analysis and management | Firms appear to be very cognisant of the risks posed by different countries in sub-Saharan Africa and will weigh these risks against rewards before entering a particular jurisdiction. |
| Financial considerations | Firms appear to prioritise the management of financial institutional voids in new jurisdictions. |
| Informal sources of information/data | Informal networks, such as word-of-mouth and personal connections, are regarded as more important than formal, published data about countries. |
| Approach to local partnerships | Local partners are considered essential to successful operations in sub-Saharan Africa. Some firms tend to be more reactive than proactive, seeking a partner only after winning a contract. Nearly all firms have had an unsuccessful relationship with a local partner at some point. The ability to choose a suitable local partner who aligns with the strategy seems to be crucial. |
| Personal skills above technical skills | Employees are chosen based on personal characteristics and their ability to handle country- and cultural complexity, an ability that is considered more important than technical skills. |
| Core team maintained | The core team frequently rotates across projects to facilitate the transfer of knowledge and experience. This practice also supports maintaining trust and autonomy. |
| Flat company structure | Successful firms appear to have flat company structures where country managers are allowed relative autonomy and report directly to CEO. |

The next step was to create categories from the codes, which is described below.

5.2.2 Creating Categories

The next stage in the qualitative analysis process was to group related codes into categories or sub-themes, which was performed manually in order to preserve nuanced information. The process of grouping codes into categories followed the recommendation of Lester et al. (2020) to group conceptually related codes. Codes were grouped according to similar organisational phenomena, different aspects of the same underlying capability, or shared goal or outcomes. For instance, the codes “client management”, “collaboration”, “joint ventures”, “networking”, “partnership management”, “relational capabilities”, relationship management”, “strategic partnerships”, and “synergy” were grouped under the category *Relationship and network management* because they all related to how firms manage their clients, stakeholders, and key relationships. A total of 23 categories were created.

5.2.3 Identifying themes

The next step was to group related categories under an overarching theme. Each theme and its categories were checked to ensure they represented the underlying data, whereafter each theme was given a descriptive label. Figure 5.2 illustrates the grouping of categories under themes.

Four themes emerged from the data, which are discussed below, together with verbatim supporting quotations from the transcripts of participants' interviews.

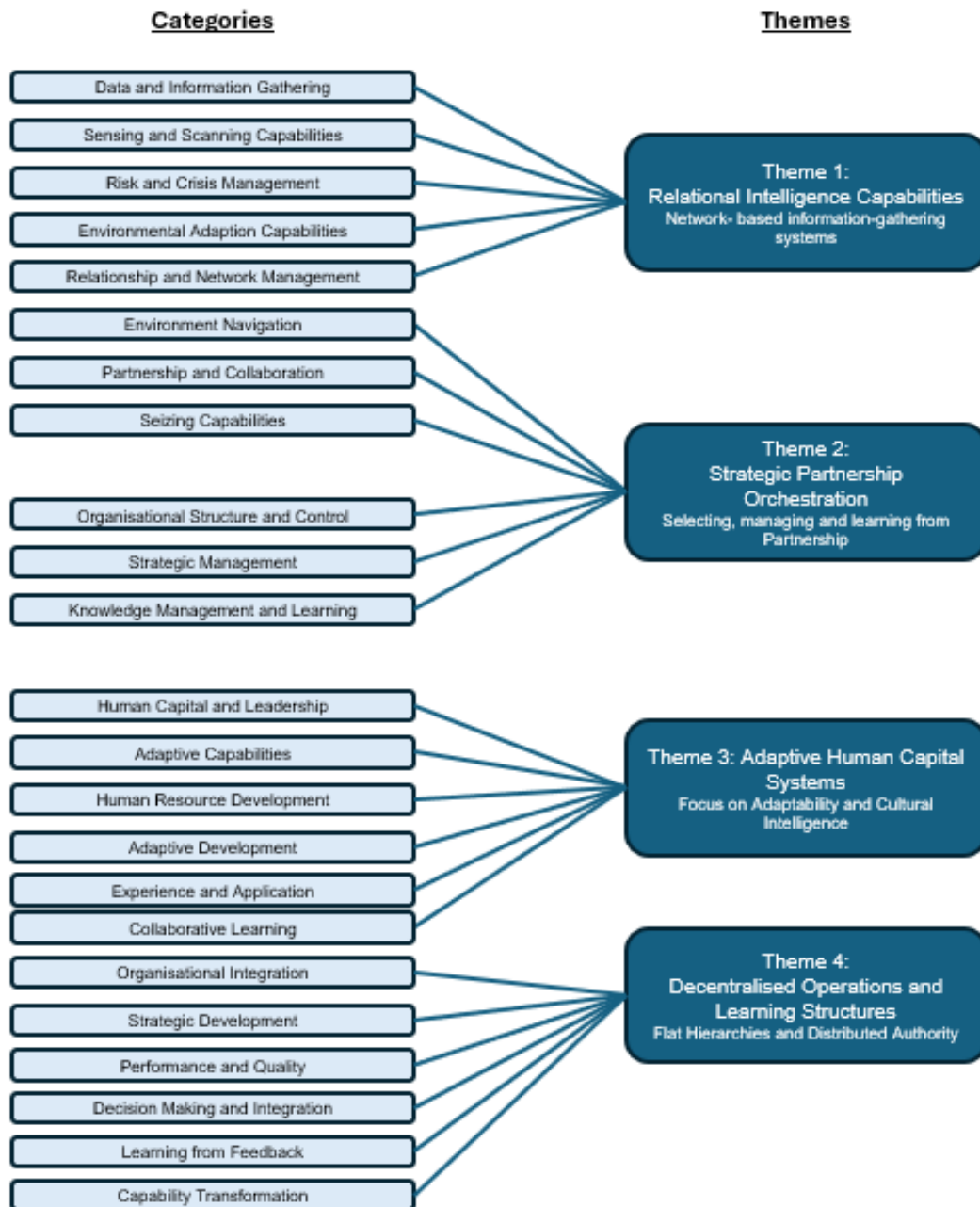
5.3 EMERGENT THEMES

5.3.1 Theme: *Relational intelligence capabilities*

This theme comprised the following categories: *Relationship and network management*, *Data- and information-gathering*, *Sensing and scanning capabilities*, *Risk- and crisis management*, and *Environmental adaption capabilities*.

Figure 5.2

Distilling Categories into Themes



Participants noted that a firm's systematic development and deployment of informal, network-based information-gathering and risk-assessment systems compensate for the lack of formal market data institutions.

A director of a major mining explosives provider operating throughout sub-Saharan Africa said the following about collecting market data in Africa:

“We made the mistake of buying a couple of those reports that these advisors come and try to offer you, and it was terrible ... they don't get it right, so it's very difficult to get information. So, we got a market intelligence team ... and reporting team, and one of the tasks of that team is gather information, ... by word of mouth, by people that used to work somewhere else, by people we meet, by people that have good experience in Africa. So, we have some contacts that we actually use, and we even pay just to interview them and ask questions. And that might even be competitors at some point, or customers... So, we use everything. We don't pay a lot of money in reports and stuff” (P7).

This quote highlights how firms prioritise informal intelligence over paid market reports, as a method of gathering market data and information.

The Group Operations Director of an opencast contract miner operating in sub-Saharan Africa shared the firm's approach to networking and collecting country information:

“... being able to travel around Africa, meet a lot of people, and having a lot of African relationships has allowed us to ... it is one of our strengths, picking up the phone, phoning someone, find out, 'How does the tax work?'" (P1).

This quote emphasises the importance for project-based firms having an informal network that can offer insights into a country's business and financial climate.

The CEO of a leading construction firm in Africa explained the company's approach to collecting country information:

“First of all, put a man on the ground. Okay, so we send a guy there a year or two in advance. It's an investment. We have some budget for it to look at new territories. Then he goes and he immerses himself into the sort of country” (P5).

This quote emphasises not only the proactive data collection strategies used by some project-based firms in sub-Saharan Africa, but also how much these firms value obtaining accurate information in new jurisdictions. This participant noted that the firm is willing to invest in strategically placing someone in a country before being awarded a contract, to gain insights into the environment.

The emphasise the importance of informal networks for gathering data about the country so that firms can adapt to the local environment, the managing director of a construction company explained described the process of gathering data about the financial regulations of a country in SSA:

“All I had to do is phone the accountant and say, Nico, can I have an hour of your time? Please show me the company that's registered. Please show me the taxes you're paying. Please show me this. Please show me that. An hour later, my auditors, my Qs were praised. We had it all there, given to us” (P6)

These informal networks also help firms to sense and scanning for potential threats and opportunities. The following quote, by the Director of the explosives provider, highlights the value that informal networks for sensing and scanning for potential threats:

“Yeah, the diamond prices have been low, and we decided, You know what, because of the information we have, because of what we see, and because we see that the companies are scaling down. We're going to take out a little bit of focus on Botswana. We're going to continue doing business, but we're going to take out the focus, and we're going to put that focus in Zambia” (P7)

This director, as a consequence of sensing that things are slowing down in one country, has decided to direct their focus on another country. Relational intelligence has helped them to sense the changing markets.

The process of gathering information through informal networks is summarised by this quote from the market analyst for one of the participating firms, who acknowledges that government officials are an important source of information:

“we have guys on the ground, yeah, that will go in, irrespective what the research says...it's a combination of what they tell us on the ground, the network on the ground, because we have, we have good relationships with government officials, ...it's a combination of research on the ground, kind of knowledge, experience previously. (P12)

The ability to gather trust-based information through word-of-mouth networks with industry peers, government officials, and clients also enables project-based firms to perform risk assessments. The Managing director of a contract mining company said

the following, which provides insights into how important relationships are to identifying risks:

“If we don't have a relationship with people or some sort of connection to the top, it's not, yeah, you could set yourself up for some some serious risks” (P4)

The quotes show how Relational Intelligence Capabilities have become a key complement to sensing abilities, reflecting adaptation to institutional gaps in sub-Saharan Africa. This capability enables firms to identify opportunities and threats in environments with limited data. Moreover, these informal networks are more agile in responding to regulatory and environmental changes characteristic of volatile countries. Built over time from clients, suppliers, peers, and government officials, these networks are regularly leveraged during various stages of a firm's operations. They are especially valuable for conducting risk assessments for market expansion and during market entry to handle unpredictable regulations and surprises.

5.3.2 Theme: *Strategic partnership orchestration*

This theme comprised the following categories: *Organisational structure and control, Partnership and collaboration, Environment navigation, Strategic management, Seizing capabilities and Knowledge management and learning.*

In many sub-Saharan African countries, establishing local partnerships is either required by regulation or deemed crucial by certain project-based firms to understand the local business environment and culture, including institutional voids. To provide emphasis to this, one director had the following to say when asked about local partnerships:

“It's always better to have a local partner” (P7)

Participants noted that a firm's increasing ability to select, govern, and learn from local partnerships, as well as to determine when partnerships are necessary, enables it to access markets and succeed operationally despite inherent partnership risks. One manager had the following to say about the advantages of having a local partner:

“It's very good to have a local partner, because they can undo and unwind, and also pick up stuff in the background that no one else would normally pick up” (P5).

This quote highlights how local partners have insight and skills to deal with local challenges that international firms are unlikely to have and that they are essential for navigating the local environment. However, firms need to know what kind of partner they are looking for as emphasised by one Managing Director:

“do you want a partner who's as technically competent as you... or do you just want a partner who can handle all the bullshit that goes around in the background? He has nothing to do operation? Sometimes that, I think is a better option” (P4).

When prompted on what the perfect partner would be, a legal and commercial manager stated that they need to be *“politically connected”* which further emphasises the nuanced process of selecting a partner.

A managing director said that *“it depends on how you set it up”* when discussing the risks of having a local partner. This was further emphasised by the CEO of a large construction firm, who detailed how their company incorporates local ownership into its structures, rather than having a local partner:

“Yes, that's why we have local directors, and we have some local ownership. We don't have a local partner. That's the strategy” (P5).

This illustrates the importance of structures and control in orchestrating strategic partnerships.

The same CEO also had the following to say about their experiences with local partners:

“We went, every time, we went in with a local partner. He's only ever enjoyed the upside. If there was ever a loss, he never contributed to that loss” (P5).

The quote highlights the importance of selecting a partner who is capable of adding value to the project of firm. Furthermore, the process of selecting the right partner can become complicated by political shifts as discussed by another director:

“... the problem, is you become tied to one person who's in power, and if he loses power, then the next person comes in, and they're going to want exactly the same treatment or they going to revoke your licence” (P7).

Several participants reported difficulties in finding suitable partners. As the managing of an underground mining company explained, the ability to find the right partner is refined through repeated experiences, including failures, and in some instances this capability may never be developed:

"I'm dealing with it. Minority partner in South Africa. We've been at war litigation for four years. We're about to conclude a settlement agreement four or five years. It's been a nightmare, that sense of entitlement. We exited a partnership in Zambia, also turned out to be quite tumultuous, and we're going to dissolve a partnership in Ghana. So, we got it wrong. We got it wrong three times. Yeah, three out of, well, three out of three. Three out of three in the last, probably in the last ten years" (P2).

These excerpts highlight the importance of high-quality local partners for success, and developing such partnerships often requires learning from past failures. This has prompted some firms to adopt a more proactive approach to selecting local partners, as discussed by one director:

"I think, with a strategy like we've developed, we're starting to do all the country due diligence now, yes, even though we don't have anything on the table, yeah, and part of that process also to think about to the extent that we need a partner, who could we possibly approach on your terms" (P2)

This firm has recognised the advantage of approaching a partner before a project is awarded so that they can dictate the terms of the agreement with the partner.

In contrast to another firm that admitted they have a more reactive approach, when identifying a partner to collaborate with in a country. The following quote illustrates that:

"The problem is that you normally don't have so much time to run a process, to kind of advertise, and so you will try to use recommendations. So you go to somebody you know, in either Botswana, somebody, you somebody can approach you, or, you know, somebody from South Africa that recommends somebody and, and I would say that we have rushed a little bit on getting the partners" (P7)

Relevantly, this quote also illustrates the importance of having a network to leverage off in order to find an appropriate partner.

Some interviewed firms detailed the advantages of a strategic partnership for market entry and how it helps them navigate the risks of a new market. The Business Development Manager for one firm explained how they align market entry with key international clients:

“So okay, so if we go into Africa, I think will be largely drawn by international clients. Okay, so we like to follow existing clients into new markets as the base rate, because we know the client. We know we’ve worked with them, understand them” (P10)

This approach, where they use the large international client as a buffer from environmental risks, helps them to mitigate the risks of market entry and focus on project delivery. Another Director emphasised a similar point, highlighting the advantages of collaborating with another firm because they were going into a country of which they had no prior experience:

“when I go to a country, it’s completely unknown to us, you know, you will join forces and join the hands of somebody that knows that paid their school fees” (P6)

Choosing the right partner, one that is aligned with the company's strategy and values, is vital, and can be a distinguishing factor between successful and unsuccessful project-based firms in sub-Saharan Africa. Having the right local partner enables PBFs to access markets and handle regulatory requirements that would be difficult or impossible to sustain as independent foreign firms.

In conclusion, strategic partnership orchestration encompasses both the skill to choose the appropriate partner at the right moment and the continuous management of the relationship. Importantly, this capability seems to have been developed through repeated partnership failures. Although local partnership appears to be important for sustained business, some participants show resistance, with their firms reacting only out of necessity. Conversely, other participant firms adopt a more proactive stance, using these partnerships to help sense threats and opportunities.

5.3.3 Theme: *Adaptive human capital systems*

This theme describes a project-based firm's methods for selecting employees, managing, and retaining their core team and experience, and includes the following categories: *Human capital and leadership, Adaptive capabilities, Knowledge management and learning, HR development, Knowledge acquisition and transfer, Adaptive development, Experience and application, and Collaborative learning.*

Successful firms apply an integrated approach to choosing, training, deploying, and retaining personnel, focused on adaptability and cultural intelligence, rather than solely on technical skills. This allows effective operations in environments that are institutionally complex and culturally diverse. Successful firms choose employees based on personal characteristics and their ability to handle country and culture complexity, rather than on technical skills.

One managing director noted:

"We don't often send our best contractor to Africa, because they can't cope ... rather have someone who understands how to work in that environment. Its more valuable than having a very clever contractor" (P5).

This point was reinforced by the legal and commercial manager of a firm, who discussed how the ideal candidate for operations in sub-Saharan Africa is not necessarily the best candidate from a more stable market:

"Okay, you need strong leaders there. And it doesn't really help to take your star performer in South Africa and dump him in the middle of Africa. You're probably setting him up for failure if that's the case... I've seen that a lot. These guys were very good in performing in South Africa. Once they got there, they didn't perform as well" (P8).

These firms' selection of personnel for sub-Saharan African operations prioritises cultural intelligence and trustworthiness over technical expertise. To emphasise this, one participant discussed the following:

"they'll team in with someone whose sole function is, maybe they can speak the language, maybe they're more locally. So sole function is to manage the people around the job" (P3).

This firm believes that understanding local conditions is so important that it considers it a task in its own right and will employ a person who can take the pressure away from the technical team by performing this role.

A managing director explained the depth of cultural understanding required:

"You must know the culture of the people you're working with ... if a Muslim, or if a Christian, or if they come from a military background ... and if a guy doesn't understand that culture, yeah, he's done. You're just done" (P5).

This cultural competence is essential because not understanding local customs and culture can lead major challenges as highlighted by one director, who had to deport two employees for swearing:

"My senior guys didn't realize that we can't swear. I really didn't, and they we got told in the beginning, guys don't use the F word. Yet, I've got two senior guys deported ... Yes, promise, just swearing. Yes, verbal abuse. There's still a court case of one of the guys" (P6).

Another important criterion that firms look for in employees is agility, which was illustrated by one participant who said that when determining who is suitable for the job, they stated that *"the right people must be agile"* (P7).

While it appears critical that candidates have the right skills and abilities best suited for these environments, they need to be trustworthy and supported. This is highlighted by participant:

"You need to get people in country that are empowered to make decisions that's very important, and for people to make decisions, you just need to support them" (P7).

The same participant highlighted the importance of trust, stating that they *"build that trust relationship with guys that are there"* when referring to the firm's team in an African country.

Participants also noted that project-based firms maintain core team consistency across projects to facilitate knowledge transfer. Firms deliberately retain key personnel as a managing director explained:

"You're trying to keep a bench strength of key people, a core strength ... you want your project manager, maybe an ops [operations] guy" (P2).

This strategic retention enables accumulated learning as another manager explained:

"I think the core stays the same ... when we transfer, we know what hasn't worked before. So, when we go to the next projects ... those guys have got a base load of information that they've learned from" (P1).

This was further emphasised by another participant who said the following about a "pool" of core personnel:

"So you can pull from this pool here, not just resources, but intelligence as well" (P6).

The approach ensures that experiential knowledge travels with mobile personnel rather than being lost between projects, while simultaneously building trust as these individuals remain with the firms.

While these core personnel appear to be critical for adapting to countries, one participant noted the following about localisation:

"localization of your business. It doesn't help sending a whole batch of expats out of there and think that they can make it on their own. Yeah, you need it. You know, you need to establish your own identity...but you need the local people. There's no way you're going to do that using people from outside. Yeah. Countries are quite xenophobic...So the more you can involve local people, entities, that sort of thing, into your business, the better" (P8).

This emphasises that while a core team can help overcome many of the challenges a country offers, they need to be able to adjust to local conditions and embrace localisation to succeed.

While this theme illustrates how capabilities develop in project-based firms, it also highlights human adaptability beyond technical skills to navigate institutional complexity. Additionally, maintaining a core team that grows with the business over time appears to help facilitate project-level learning into organisational knowledge.

5.3.4 Theme: *Decentralised operations and learning structure*

This theme comprised the following categories: *Organisational structure and control, Strategic management, Organisation integration, Strategic development, and Performance and quality.*

Successful project-based firms in sub-Saharan Africa often have flatter structures, where country and regional managers operate with relative autonomy and report directly to a CEO overseeing the project-based firm's entire area of operations. This structure, designed for rapid response, provides firms with the agility to adapt to changing environments while maintaining their performance. A flatter organisational structure also facilitates knowledge transfer across the organisation.

The firms' systems facilitate knowledge integration, application, and decision-making through flat hierarchies, distributed autonomous authority, and direct feedback loops between projects and leadership. This promotes continuous learning from project experiences and enables rapid decision-making in order to remain agile and adaptable.

To illustrate the disadvantage of an isolated silo structure as opposed to an open, flat structure, one managing director shared his experiences with isolated business units:

“... each running silos, so there was no transferred knowledge... So, you built a whole lot of silos, and you're going to operate in silos. Each silos must fend for itself “(P4).

This quote clearly indicates that when firms operate in silos, knowledge, resources and experiences are not shared, causing each silo to “fend” for themselves.

Another managing director explained that his firm used to be much more siloed, leading to tension between different divisions within the company.

“There was a bit of animosity back in the day, where it was more, much more siloed then. But I think this last couple of years, things started to mend, you know, much more closer to each other” (P6).

This is further emphasised by another managing director who said:

“and we all sat down by any job campaign or whatever. Yeah. Then the roads, the road section was still losing money, okay, so then they started blaming the Plant Company....Long story short, we ended up on a bit of a punching match” (P4).

A less hierarchical, more corporate structure offers notable benefits in sub-Saharan Africa, including quicker decision-making and less bureaucracy.

As one managing director stated:

“Decision-making processes are quicker, so speed... So, risk profile and decision making, those two put a [name] type business in a better space than corporate” (P2).

This efficiency arises from flatter organisational setups where senior managers report directly to leadership. The managing director explained that, despite being part of a large organisation with multiple managing directors worldwide, he reported directly to the overseas CEO, facilitating rapid decisions without excessive administrative red tape.

Another participant from the same firm as the managing director, discussed the following about how their business facilitates cohesion between regions:

“The african strategy is to make sure that the South African office remains the custodian of the of the skills, so your sharp seeking expert, the mining expert, those leads are in South Africa. They will interact with the different in country managers to ensure that there is cohesion” (P3).

One participant strongly agreed when prompted about the importance of a flat hierarchical structure to ensure quick decision making, while further stating that decisive leadership is also important:

“100% all the time. That's what makes a good performer, at the end of the day. It also gives your people confidence. Don't have to sit around and hang around. They've got an excuse to sit around and hang around and wait for this decision, wait for that decision.” (P4)

A flatter, less siloed organisational structure facilitates improved knowledge transfer by providing decision-makers and strategy planners with better access to each other.

This encourages the natural osmosis of knowledge and experience throughout the organisation.

In this regard, a COO noted:

“So, myself and [name], looking after Africa, somebody looks after Australia. But there's also integration between the different operations, absolutely. So, there's shaft-sinking, and there's a global conference where information is shared. There's task teams that meet on a monthly basis, that share latest projects, project status updates, and key lessons” (P3).

In conclusion, this theme demonstrates how project-based firms in sub-Saharan Africa structure their organisations to address regional challenges and facilitate knowledge sharing and integration. Flat hierarchical structures allow firms to foster regional autonomy, make quick decisions, and enhance agility and adaptability. Furthermore, feedback from interview participants who previously worked in hierarchical, siloed organisations indicates that decentralisation is vital for survival in sub-Saharan Africa.

5.3.4 Recurring patterns of interest from Memoing

To help emphasise the themes above, the following additional quotes, aligned with the patterns of interest that emerged in the memo phase, have been extracted.

Risk Analysis and Management:

“The more remote countries are more difficult to do business in. The margins are better there because because of the lack of competition as well. But it comes with its own sort of risks as well” (P6).

“[Company name] appetite for risk is quite a lot greater than what [company name] was there now, which is probably why they are a hell of a lot more successful.” (P8)

“And you know, to an extent that that could lessen your risk a bit there too, if you could find a company that'll rent you graders, that sort of thing, and they write that now that sort of thing helps” (P8)

These quotes aim to emphasise how the participating firms operating in sub-Saharan Africa are well aware of, and carefully consider, the risk in each country. Where possible, they try to implement strategies to manage this risk.

Financial Considerations:

“I think one of the greatest things people overlook in working in Africa are the sort of tax regimes and things like that. Yeah, despite what you see on paper, what it is there too, it's very often a hit and miss” (P8)

“can you repatriate your money, all those things need to be looked at” (P8)

“our FMS (Financial Managers) job is to get the money out..but paying the tax that is due..we pay a fair tax, we declare a dividend and we take our money out...everyone is happy...but sometimes they (the government) don't want you to do that. In [country name] we have money stuck there. They are F'ing us around, they want this piece of paper and that piece of paper. We just keep fighting it” (P5)

This final quote, which was made by a regional managing in West Africa, paints an effective picture of the financial challenges these firms face working in Africa. It emphasises the resources and personnel that they need to dedicate in order to ensure fair repatriation of funds.

These quotes highlight the importance of managing the financial considerations of countries in the region, emphasising the risks or challenges that can occur if not managed properly.

Informal source of information and data:

“the chances because we have been around for 40 years of somebody like [name] knowing somebody is actually quite good, yes, and [name] has got a good relationship for senior guys in the mining houses...[name] will chat to so and so and he said the following things..we spoke about a project in Africa and they said the following things..you get to a point with a desktop study and then you need to start getting into your contacts” (P11).

This quote highlights the importance of informal sources of information and relationships into find out upcoming projects and opportunities.

Approach to local partnerships:

“They tend to know what's going on. And so yes, it's either through that foot, that industry body, or the political connection and so forth. But again, partner versus partner, we've got a good partner in Ghana, for example, he's he's got his own business, mining contract and business or one, and he's on top of it. His predecessor was absolutely useless. So it's all a question of finding the right guy. So if we sort of said to each other, We'd rather go and partner with businesses than with individuals, it's like all the politics here. People want money for nothing and then can't really contribute and so on (P10)”

This quote highlights the dilemma regarding the selection process for a local partner, as well as the particular approach to it.

Personal skills above technical skills and Core Team retention:

“Yeah, it's all about people. So I've got some core people. They not the sharpest, cleanest diamonds in the world, but you know what you're dealing with, yeah? And they, they'll go down for you in the country, yeah? And you need those kind of people. You can't go into a country with a new guy, yeah. And that's really how we transfer the knowledge” (P5)

“you've got a couple of these pioneers that do it for me..And one guy's probably opened almost all our companies, a guy you put on the ship first. So he's like a specialist, sort of, yeah. He's just someone that you can trust to do it, and that's what you need” (P5)

These two quotes, which address two recurring patterns of interest, highlight how firms prioritise sending a team of people they trust and know. Furthermore, technical skills or professionalism are not prioritised, as clearly shown by the first quote when the manager states *“they not the sharpest, cleanest diamonds in the world but you know what you are dealing with”*.

The second quote re-emphasises the importance of having a core team that is retained through projects, which is crucial for pioneering into new territories, with one member of his team being the person who has started most of their projects in Africa.

After presenting, Chapter 6 will provide a more detailed theoretical analysis and discussion connecting the emerging themes back to the research. It will investigate the implications for DC theory and project-based firm literature, particularly within the sub-Saharan context. The discussion will revisit the main purpose of the research, drawing on existing literature and the findings to clarify what project-based firms need to do to sustain operations in sub-Saharan Africa.

6. DISCUSSION OF FINDINGS

This chapter reviews the aim of the study and discusses the findings of the study in alignment with relevant extant literature.

6.1 OVERALL AIM OF THE STUDY

This research was aimed at broadening the understanding of DCs in the context of project-based firms in sub-Saharan Africa. The study identified the DCs that enable project-based firms to sustain operations across sub-Saharan Africa, where institutional voids characterise the business environment. Specifically, it sought to determine whether the region's unique institutional context, combined with the temporary and fragmented nature of project-based work, necessitates a distinct set of capabilities that differ from those identified in traditional, stable markets, and to understand how these contextual factors influence the development, transformation, and deployment of such capabilities. The research questions were aimed at exploring the classification of DCs in project-based firms in this context and whether these capabilities could be reclassified as OCs or DCs.

Current research on DC often concentrates on stable markets, and lacks focus on local contexts, especially those of sub-Saharan Africa. The deeper insights into DC theory gained through the present study in this setting could offer valuable practical guidance for decision-making and investment strategies. Such understanding has the potential to attract more FDI and promote economic growth across the region.

The main findings of the study are reviewed in the next section.

6.1.1 Summary of Findings

The study revealed that project-based firms successfully operating across sub-Saharan Africa develop at least four interconnected dimensions of capabilities that enable them to navigate institutional voids and the temporary nature of project-based work.

The first capability, relations-based intelligence, describes how project-based firms rely on informal, trust-based networks to sense opportunities and threats and gather

market intelligence, rather than formal data, as this is often unreliable in sub-Saharan Africa contexts.

The second capability, strategic partnership orchestration, refers to the development of the ability to select, manage, and learn from local partnerships, often through project failures. This capability is crucial to gaining market access and navigating regulations and institutional voids.

The third capability, adaptive human capital systems, requires prioritising cultural intelligence, humility, and adaptability over technical skills when selecting personnel, coupled with maintaining a trusted, stable core team that rotates across projects in order to preserve experiential knowledge.

Lastly, the fourth capability, decentralised operations and learning structure, is operationalised through a flat organisational hierarchy with autonomous country managers reporting directly to senior leadership to enable rapid decision-making. This facilitates knowledge transfer across projects and prevents the loss of knowledge due to organisational silos.

The findings further suggest that traditional classifications of DCs versus OCs may need to be reconsidered within environments characterised by institutional voids, specifically sub-Saharan Africa. Capabilities such as informal, network-based sensing and rapid decision-making, which are usually deemed DCs that provide a competitive edge in stable markets, should be reclassified as foundational or ordinary in sub-Saharan Africa, as they are a ubiquitous requirement across firms in this context, and are essential for survival. Based on the findings of the present study, the ability to orchestrate strategic partnerships, especially with local stakeholders, should remain a DC, given that the variation in outcomes with local partners across participant firms distinguishes their performance. The findings also address the dilemma of temporary versus permanent capabilities faced by project-based firms, revealing that firms navigate this paradox by embedding capabilities within mobile personnel rather than rigid organisational structures. Firms utilise repeated exposures for learning and establish cross-project knowledge-sharing mechanisms with informal feedback loops. When combined with decentralised autonomy and trust, this approach enables swift deployment in new contexts, despite the fragmented nature of multiple individual projects. The findings are discussed in detail

in subsequent sections, together with extant literature, and related to the study's questions.

The discussion starts by identifying which specific DCs are essential to project-based firms' success across sub-Saharan Africa, comparing the four capabilities with established DC frameworks and evaluating whether Teece's (2018) sensing, seizing, transforming triad remains applicable in project-based firms functioning in sub-Saharan Africa, which is characterised by institutional voids. The discussion then addresses how project-based firms develop and deploy these capabilities despite their projects being temporary and fragmented, suggesting that this could challenge traditional beliefs about the necessity of stable organisational routines for developing DCs. The section also discusses how project-based firms utilise specific organisational mechanisms to bridge the gap between project- and organisation levels, transforming project-specific knowledge into lasting capabilities at the firm level. The next part of the discussion looks at whether capabilities usually identified as dynamic in developed markets have become basic necessities for survival in sub-Saharan Africa and explores the possible need to reclassify these capabilities according to this specific context.

6.2 DCs THAT CHARACTERISE SUCCESSFUL PROJECT-BASED FIRMS OPERATING IN SUB-SAHARAN AFRICA

In answering RQ1, the study identified several primary capabilities and lesser yet connected capabilities that support sustainable project-based firm operations across sub-Saharan Africa. These capabilities exhibit characteristics and connections indicating that they could be considered DCs in this context.

6.2.1 Relational Intelligence Capability

The findings indicate that four primary capabilities are essential for project-based firms to sustain operations in sub-Saharan Africa. The first capability, which aligns with the sensing competency of Teece's (2018) sensing, seizing, transforming triad, is relational intelligence. This capability reflects a firm's ability to rely on informal, trust-based networks to detect opportunities and threats or, as Pitelis et al. (2024) describe it, the ability to utilise resources effectively when recognising and assessing changes in the external environment. In the context of project-based firms in sub-

Saharan Africa, these resources are in the form of informal networks developed by experienced firms over many years of operation. This capability, as highlighted in both the present study's findings and by Andrews and Luiz (2024), is necessary in sub-Saharan Africa to overcome the scarcity of accurate formal market data, resulting from institutional voids, and the absence or ineffectiveness of market-supporting institutions (Liedong et al., 2020). Without relational intelligence capabilities, firms will struggle to gather vital intelligence about how to operate within a country and navigate the institutional voids that characterise it. Moreover, firms will struggle to continuously monitor and sense alterations in these volatile environments, which is critical, given the regulatory uncertainty and political risk present in sub-Saharan Africa markets (Asongu & Odhiambo, 2020). The present study's findings show a strong link between how project-based firms manage risk and crises and their relational intelligence capability. The study found that project-based firms use this capability to conduct risk analyses of potential countries into which they aim to expand and, in some cases, to determine when to exit a country.

Schoemaker et al. (2018) posit that strong peripheral vision, which enable firms to notice changes before they occur, is a vital element of sensing capability. In sub-Saharan Africa's volatility contexts, where signals of regulatory shifts or political changes can initially be very weak or undetectable through formal channels, comprehensive informal networks, built on trust and accumulated experience, become the primary mechanisms for detecting these early warnings. Without networks capable of providing timely and accurate information, the ability to 'see around corners' becomes ineffective.

Beyond its role in sensing, the study findings support the view that the relational intelligence capability functions as a foundational mechanism, as indicated by Brock and Hitt's (2024) meta-DC of building and Li et al.'s (2025) description of dynamic knowledge management. Through informal networking with clients, suppliers, government officials, and peers, project-based firms access external knowledge and resources across multiple sub-Saharan Africa contexts. Unlike local firms limited to a single market, these networks enable these firms to draw knowledge from diverse institutional environments and leveraging relationships as a key external resource, aiding them in developing new capabilities.

The findings show that informal intelligence gained through relational networks is vital context-specific knowledge that project-based firms must acquire and integrate into their existing organisational knowledge. The findings of the present study indicate that project-based firms operating in sub-Saharan Africa cannot depend on formal market data. This requires that they develop a relationship-based intelligence capability, which is a key part of their absorptive or strategic knowledge-creation capacity—that is, their ability to acquire, assimilate, and utilise knowledge from diverse international sources (Pitelis, 2024).

In summary, the findings suggest that relational intelligence capability may extend beyond its role as a sensing mechanism, functioning as a multi-dimensional DC, one that is fundamental to project-based firm success in sub-Saharan Africa. The study findings indicate that this capability may address institutional voids by substituting absent or unreliable formal information systems with a trust-based network. Relational intelligence in project-based firms operates as a critical element of sensing, a knowledge-acquisition mechanism, and a capability-building function. This enables project-based firms to detect opportunities and threats in volatile environments while systematically developing new operational approaches through cross-border learning and knowledge transfer.

6.2.2 Strategic Partnership Orchestration

To sustain operations across sub-Saharan Africa, project-based firms need to possess the ability to select, manage, and learn from local partnerships, termed strategic partnership orchestration in the present study. The study findings suggest that this capability, which varies amongst project-based firms and influences partnership outcomes, offers firms a genuine competitive advantage. This capability aligns with the localisation DC described by Golgeci et al. (2019) and Brock and Hitt (2024). International firms that invest heavily in and collaborate effectively with local partners while adopting local customs are more likely to succeed (Brock & Hitt, 2024). Golgeci et al.'s (2019) study found that localisation is positively associated with success in emerging markets, particularly in countries with higher institutional development. The present study indicates that localisation has a positive correlation with success even in countries where institutions are less developed.

In sub-Saharan Africa, this capability is vital to securing market access, as local content is often required to meet ownership obligations. Additionally, having a local partner helps project-based firms manage regulations and fill institutional gaps. Andrews and Luiz (2024) describe institutional gaps as absent or ineffective market-supporting institutions, and the present study's findings show that local partnerships serve as substitutes for these absent formal structures. Partners provide access to informal regulatory channels and offer buffers against political uncertainty, effectively filling gaps in formal institutional infrastructure that would otherwise prevent sustained operations.

The study findings also highlight that this capability tends to be acquired through repeated failures. Multiple participants reported unsuccessful partnerships, with one firm having experienced failure in three consecutive attempts in South Africa, Zambia, and Ghana, respectively. This supports the notion that strategic partnership orchestration functions as a DC in project-based firms, which is consistent with Li et al.'s (2025) distinction between OCs and DCs, where OCs are considered easily imitable and straightforward to learn from external sources. The ability to develop strategic partnership orchestration appears to be gained only through experience.

Beyond its alignment with localisation, strategic partnership orchestration corresponds to Teece's (2018) seizing competency in the sensing, seizing, transforming triad. Seizing involves addressing opportunities and threats through investment and resource mobilisation (Teece, 2018). Strategic partnerships enable this in the sub-Saharan Africa context. The present study found that local partnerships provide project-based firms with essential knowledge and resources that would be difficult to gain or mobilise as a foreign entity acting independently. This provides the required market access, local legitimacy, and regulatory navigation capabilities that are necessary to be successful in sub-Saharan Africa. Without this capability, project-based firms would not be capable of seizing opportunities that have been identified through relational intelligence.

An important distinction that was revealed in the present study is how project-based firms deploy this capability. While some firms approach partnerships more reactively, seeking local partners only after regulatory or environmental requirements demand it, it appears that more successful firms adopt a proactive approach. Proactive firms leverage partnership orchestration not merely for seizing opportunities, but also as

an extension of their sensing capabilities. They use partners to identify emerging opportunities and gather intelligence about market conditions. The dual functionality, which enables both sensing and seizing, highlights the close link between this DC and relational intelligence, and appears to distinguish strategic partnership orchestration from more narrowly defined DCs.

6.2.3 Adaptive Human Capital Systems

The third key capability for sustained success of project-based firms in sub-Saharan Africa is adaptive human capital systems. The present study found that project-based firms prioritise cultural intelligence, humility, and adaptability over technical skills when choosing staff. Furthermore, project-based firms keep a trusted core team that moves between projects, thus retaining experiential knowledge through personnel mobility. The capabilities required to succeed are embedded within individual staff rather than fixed organisational structures.

While there is limited literature that explicitly discusses this capability, the present study found that this is an important supporting capability, rather than a DC. Its presence enhances a firm's ability to execute the two primary capabilities mentioned above. Without retaining the right human capital, i.e., individuals willing to engage with local networks and partners, firms will struggle to develop or maintain both relational intelligence capabilities and strategic partnership orchestration.

The present study's findings indicate that this capability should be classified as a microfoundation, as defined by Teece (2023). Microfoundations act as mechanisms that facilitate the development of (higher-order) DCs. They represent individual actions that adjust, recombine, or create new a firm's capabilities (Pitelis et al., 2025). Although this may seem to contrast slightly with the role of this capability as a microfoundation within the present study's context, the core concept remains aligned; without this capability, project-based firms would have reduced ability to sense, seize, and transform, as outlined in Teece's (2018) framework. Without this capability and its associated human capital, a firm would lack the knowledge and skills required to implement dynamic knowledge management. Since dynamic knowledge management bridges DCs with their practical application, Li et al. (2025) argue that it should be regarded as an additional microfoundation. By extension, adaptive

human capital systems that enable dynamic knowledge management function as both a supporting capability and a DC in their own right.

The ability to retain a core team and deploy it to different projects also aligns with Brock and Hitt's (2024) description of the meta-DC of leveraging. This core ability is described as the capacity to deploy an existing resource from one context to another. Adaptive human capital systems mimic this meta-DC, with human capital being the redeployed resource. The findings of the present study align with those of Brock and Hitt (2024) in that this ability is critical for replicating operational success across geographical contexts.

As a fundamental aspect of this capability is prioritising country- and culture-specific adaptation over technical skills, this capability plays a critical role in fostering an adaptive mindset. The ability to adapt or transform represents the final dimension of Teece's (2018) sensing, seizing, transforming triad. Firms that are incapable of transforming are unable to capitalise on the opportunities and threats identified during sensing and seizing activities. This connection to the third aspect of the triad, as well as the capability requirement to support the first two aspects, reiterates Zahra et al.'s (2022) statement that these three activities complement each other to create an ongoing cycle of evolutionary adaptation.

6.2.4 Decentralised Operations and Learning Structures

The final capability revealed by the present study for sustained project-based firm success in sub-Saharan Africa is the ability to operate as a flat organisational hierarchy, where country- and project managers act autonomously and report directly to senior leadership, captured in the term *decentralised operations and learning structures*.

This capability, which aligns closely with Teece's (2018) transforming cluster of the sensing, seizing, transforming triad, allows project-based firms to be agile and make rapid decisions. Transforming, defined by Brock and Hitt (2024) as a meta-DC, allows project-based firms to swiftly deploy new capabilities and resources across different contexts. Furthermore, as Kurtmollaiev (2020) also argues, having more influential individuals expands the willingness to change within the group, boosting the chances of innovation and flexibility, which are essential to the success of project-based firms.

A key feature of this newly defined DC is its capacity to facilitate knowledge transfer across various projects. Since project-based firms do not operate in isolation and often engage in formal and informal cross-border learning activities, knowledge is generated, preserved, and applied across different contexts through this capability. This approach supports Pitelis et al.'s (2024) critical strategic DC of strategic knowledge creation. Effective firms identify, acquire, and manage knowledge efficiently by integrating it with their existing understanding and aligning it with their changing strategic goals.

The decentralised and autonomous nature of successful project-based firms also enables these firms to be ambidextrous, which Ochie et al. (2022) describe as a key strategic DC for international firms operating across multiple jurisdictions. Ambidexterity is a firm's capacity to undertake multiple and sometimes conflicting tasks simultaneously (Ochie et al., 2022). Because managers in these firms are given greater autonomy, they can operate their regions or countries differently from others within the firm. This allows them to refine their resources and capabilities to best suit the environment or the state of the market.

6.2.5 Concluding Remarks with Regard to RQ1

This study identifies four interconnected primary DCs essential for sustained project-based firm operations in sub-Saharan Africa: Relational Intelligence, Strategic Partnership Orchestration, Adaptive Human Capital Systems, and Decentralised Operations and Learning Structures. The context-specific DCs map closely to Teece's (2018) sensing, seizing, transforming triad. The relational intelligence capability functioning as an important element of the foundational sensing mechanism. Strategic partnership orchestration enables seizing through localisation, and decentralised operations and learning structures facilitate transformation through organisational agility and cross-border learning. These capabilities do not operate in isolation, but form a mutually reinforcing system, with adaptive human capital systems serving as a vital microfoundation that underpins the effective deployment of the other three DCs. Collectively, these capabilities may address the institutional voids characteristic of the sub-Saharan Africa market by substituting absent or ineffective formal market-supporting institutions with trust-based networks and local partnerships.

6.3 HOW PROJECT-BASED FIRMS DEVELOP AND DEPLOY CAPABILITIES

The present study found that successful project-based firms develop several mechanisms for building, deploying, and transforming DCs while addressing the temporary–permanent paradox, which Denicol and Davies (2022) describe as the challenge of developing permanent knowledge from numerous, often unique and temporary projects. This dilemma is further articulated by Hermano and Martin-Cruz (2020), who emphasise that retaining knowledge when projects conclude is a significant challenge for project-based firms. While Hermano et al. (2022) recognize that project-based firms must develop standardised routines that transcend individual projects to enable firms to embed project-level learning into organisational knowledge, the present research found that, for project-based firms operating in sub-Saharan Africa, such standardised routines are challenging to establish. Instead, the findings reveal specific organisational mechanisms that help project-based firms resolve this paradox, demonstrating how project-based firms transform temporary learnings into enduring firm-level capabilities through people and structure rather than rigid processes.

6.3.1 Capabilities are Embedded within Mobile Personnel

A key finding from the present study, which fundamentally differs from Teece's (2018) theory that DCs are built through organisational routines and stable processes, is that project-based firms embed capabilities within mobile personnel rather than rigid organisational structures. By maintaining a core team deployed across various projects, project-based firms opt to retain capabilities gained through experience and project learning, rather than formalising these capabilities into structured processes and procedures. This mechanism helps to ensure that project-level lessons are retained after projects conclude, as described by one managing director: *"The core management team ... has stayed the same. So, when we transfer, we know what hasn't worked before. So, when we go to the next projects ... those guys have got a base load of information that they've learned from"* (P1). Furthermore, as the team grows and these individuals progress into senior leadership roles, repeated repetition and deployment of this knowledge over time enable project-level insights to gradually evolve into firm-wide experience.

The suitability of this method for developing DCs, compared to the formalised organisational routines described by Teece (2018), arises from both the temporary nature of project-based work and the diverse environments that characterise work across multiple sub-Saharan African jurisdictions. Teece (2023) discusses the role of routines in the development of DCs. DCs become embedded in a company's routine signature processes that are unique to the firm (Teece, 2023). Although project-based work involves routines and processes, the varied nature of projects across different countries makes establishing regular routines in project-based firms within sub-Saharan Africa quite challenging (Denicol & Davies, 2022). The study highlights that routines and structures may not be appropriate in this context. The challenge of implementing suitable routines across the diverse environments of sub-Saharan Africa could actually impede rather than enhance capability development. Furthermore, this enforced rigidity could hinder a project-based firm's ability to be agile and adaptive, curtailing its success.

This people-centric approach does more than simply retain knowledge; it aligns with the leveraging of a meta-DC described by Brock and Hitt (2024), whereby the effective deployment of existing resources from one context to another enables the development of other DCs. More fundamentally, it creates what Pitelis et al. (2025) describe as microfoundations: processes and individual actions that adjust and recombine a firm's capabilities, enabling the development of higher-order DCs. The findings of the present study suggest that core team retention and mobility act as microfoundations in project-based firms, with accumulated experience enabling the development of higher-order organisational capabilities. This confirms that investing in human capital in the form of individuals with proven skills and experience is an effective substitute for organisational routines and signature processes. Moreover, this approach allows for stability, not in organisational structures and routines, but in personnel continuity. This directly addresses Denicol and Davies's (2022) temporary–permanent dilemma by ensuring experiential knowledge travels with mobile personnel rather than being lost between projects.

6.3.2 Learning through Repeated Exposure

Findings from the study suggest that the temporary, fragmented structure of project work actually provides an advantage for capability development by exposing project-based firms to multiple learning opportunities across various projects. Through trial,

error, and refinement in different contexts, project-based work indeed complements several strategic DCs. For example, strategic knowledge creation or absorptive capacity is a firm's ability to acquire, assimilate, and utilise knowledge from various international sources (Pitelis, 2024). Successful project-based firms working in sub-Saharan Africa, who are naturally exposed to multiple sources of information, enhance their ability to acquire knowledge. Similarly, localisation, which describes a firm's ability to adapt to global operations by adjusting to local contexts, will be complemented, because project-based firms are forced to localise in order to operate in sub-Saharan Africa (Gölgeci et al., 2019). Project-based firms that do not localise will not be able to navigate the complex environments in which they operate.

The present study's findings suggest that project-based firms' repeated exposure across multiple projects also enhances their organisational agility, which is the ability to renew and remain flexible without sacrificing efficiency (Brock & Hitt, 2024). Through continuous cycles of resource mobilisation for short-notice project execution, these firms develop rapid response capabilities. The cumulative experience from diverse project contexts accelerates their ability to deploy capabilities swiftly, transforming what might initially be reactive adaptations into proactive, efficient, and dynamic responses to environmental changes.

Lastly, Brock and Hitt (2024) discuss building or developing new capabilities from internal and external resources. External resources include foreign contexts and local partnerships. By continuously engaging with diverse types of work, clients, and countries, project-based firms almost inevitably develop new skills.

6.3.3 Knowledge Acquisition and Transfer Systems

The final method of DC development identified in the present study is the establishment of formal and informal mechanisms to facilitate learning transfer across projects. This is in addition to retaining a core team and is operationalised across multiple teams. While successful project-based firms tend to operate in a decentralised structure, promoting autonomy amongst geographical leadership, conscious efforts are made to avoid creating divisional silos where information becomes trapped within structural or geographical barriers, which would nullify the learning benefits gained from individual projects. These firms also regularly engage in informal yet organised feedback sessions.

Additionally, project-based firms are often arranged in flat hierarchical structures, where project leaders report directly to a senior manager or director overseeing several projects or countries. This ensures that there are members in the organisation who are receiving feedback and learning from multiple projects. Such broad oversight facilitates the natural sharing and transfer of knowledge across projects, enabling insights gained from one project to benefit others.

The theoretical significance of flat structures extends beyond operational efficiency. As Kurtmollaiev (2020) argues, in flatter organisational structures, more individuals are capable of influencing change, which enhances innovation and flexibility. The findings of the present study suggest that, in flatter structures, more individuals are exposed to project experiences, which improves the capturing of knowledge. Regional and country managers who are directly exposed to project-level experiences are able to access senior leadership directly, translating local learning into organisational strategy, thus avoiding the knowledge loss typical of hierarchical structures.

As Teece (2018) discusses, shallow structures make organisations more innovative but could compromise control. The present study found that project-based firms in sub-Saharan Africa recognise that the agility and knowledge transfer gained from these flatter structures outweigh the control concerns, which they reduce by employing trusted, culturally intelligent individuals.

6.3.4 Deployment of DCs

While the findings show that project-based firms deploy DCs through a network of quick, context-sensitive actions, their deployment approach closely resembles the development of DCs. The keeping a core team and maintaining a decentralised structure that encourages autonomy, designed to facilitate fast decision-making and flexibility, also support effective deployment of DCs.

These findings align more closely with Choi et al.'s (2018) empirical observations than with traditional DC theory. Choi et al. (2018) demonstrated that successful project-based firms implement decentralised organisational structures with region-based management systems that respond rapidly to local market and cultural needs. This allows businesses to operate independently rather than through centralised control. The present study extends this view by revealing that decentralised authority

not only enables autonomy but also facilitates rapid decision-making and the mobilisation of strategies and resources. This is achieved this by empowering adaptable individuals who have been selected for cultural intelligence. The combination of decentralised autonomy and trust-based systems enables swift capability deployment to new contexts.

6.3.5 Concluding Remarks with Regard to RQ2

The findings related to RQ2 make several important theoretical contributions. First, they address Hermanto and Martin-Cruz's (2020) concern about knowledge loss when temporary projects are completed by showing that capabilities can persist through people rather than processes. The present study reveals that project-based firms successfully navigate the temporary–permanent paradox by embedding qualities within mobile personnel rather than rigid organisational routines. This people-centric strategy, combined with repeated exposure across diverse projects and deliberate knowledge-transfer mechanisms, potentially transforms the seemingly fragmented nature of project work from a liability into a strategic advantage.

The study findings further suggest that the temporary structure might actually accelerate capability development by providing multiple learning opportunities across varied contexts, while decentralised organisational structures with flat hierarchies enable both rapid deployment and continuous knowledge circulation. This approach appears to be well-suited to the heterogeneous sub-Saharan African environment, where rigid, standardised processes likely impede rather than enhance organisational agility.

Furthermore, these findings advance DC theory by showing that the temporary–permanent dilemma can be resolved through mechanisms that embed capability in flexible personnel rather than rigid structures. This approach allows project-based firms to leverage project temporality to gain knowledge and support capability development. Capabilities requiring organisational stability can be developed within inherently unstable project structures. Thus, although project-based firms lack structural stability, they can achieve organisational stability through well-cultivated personnel stability.

The present study's findings challenge Teece's (2019) emphasis on organisational routines by suggesting that investing in culturally intelligent and adaptable individuals and empowering them with decision-making autonomy could enable project-based firms to create a dynamic system where capabilities remain fluid and adaptable. These capabilities are then continuously refined through project cycles while being permanently retained within the organisation's human capital.

The findings also provide additional context to Zahra et al.'s (2022) description of the sensing, seizing, transforming triad as an ongoing cycle of evolutionary development. In project-based firms, this cycle operates at an accelerated pace due to the condensed timeframes and different environments. Core teams may experience compressed cycles within individual projects or countries. This compressed evolutionary cycle is facilitated by, and its learnings transferred through, the two identified mechanisms. This enables project-based firms in sub-Saharan Africa to develop the more robust DCs required to navigate regional complexity better than firms relying solely on gradual organisational learning through formal routines.

These findings also help to provide operational context to the concept of microfoundations described by Pitelis et al. (2025) and Teece (2023). According to these authors, microfoundations are processes, procedures, and individual actions that enable the development of higher-order DCs. Based on the present study's findings, in project-based firms operating in sub-Saharan Africa, the primary microfoundation appears to be human capital itself, specifically individuals who possess accumulated cross-project experience and cultural adaptability. This challenges assumptions that microfoundations are limited to processes, suggesting that, for project-based firms in sub-Saharan Africa, human-based microfoundations are more effective than process-based ones.

6.4 RECLASSIFICATION OF DCs IN THE CONTEXT OF SUB-SAHARAN AFRICA

DC theory holds that multiple definitions are used to classify DCs. Pitelis et al. (2025) describe DCs as capabilities that enable firms to perform tasks correctly and at appropriate times. Teece (2018) argues that DCs provide firms with the capacity to develop and maintain a competitive advantage. Brock and Hitt (2024), in their review of DCs in international companies, offer a more context-oriented definition, stating

that DCS are capabilities that enable firms to adapt, innovate, and reconfigure resources in complex settings. While this discussion will draw on these definitions to better classify the DCs identified in the present study, taking into account the specific context in which they were developed, particular focus will be placed on Teece's (2018) definition and the perspective of competitive advantage versus survival.

The institutional context in which capabilities exist greatly influences their strategic significance. Teece (2018) developed a DC framework primarily based on observations of firms operating in stable institutional environments. These environments are characterised by functioning market mechanisms, reliable sources of information, and predictable regulatory frameworks, all of which ease doing business. However, Liedong et al. (2020) contend that institutional voids, which are the absence of these mechanisms that facilitate business activities, fundamentally change the capability requirements for a firm's survival and success. Andrews and Luiz (2024) posit that such voids create contexts where traditional capability classifications may no longer be applicable, as firms must develop essential capabilities simply to operate. This is further supported by Brock and Hitt's (2024) observation that firms operating across institutionally diverse regions require more robust DCs, suggesting that institutional complexity and heterogeneity raise the bar for what constitutes a competitive advantage.

This raises an important question: How much does context, especially the institutional voids in sub-Saharan Africa, influence the classification of DCs? Do capabilities that offer a competitive advantage in developed markets become basic requirements for survival? These questions are explored in the subsequent discussion.

6.4.1 Reclassifying Capabilities as Ordinary in Sub-Saharan Africa

This section discusses capabilities that should be reclassified as OCs.

6.4.1.1 *Relational intelligence capability*

Teece (2018) identifies sensing, the ability to recognise opportunities and threats, as a core DC that serves as a foundation for all DCs. Developing the ability to sense allows firms to adapt strategically ahead of their competitors (Pitelis et al, 2025).

Hermano et al. (2022) explain that sensing in project-based firms involves systematic information-gathering and monitoring of conditions throughout a project's lifecycle. However, Hermano et al.'s (2022) research, like that of Teece (2018), focused on firms operating in stable markets.

The findings from the present study indicate that all project-based firms, regardless of their performance, primarily rely on informal, relationship-based networks for market intelligence, rather than on formal or systematic data sources. This process closely aligns with the concept of sensing as described by Pitelis et al. (2024), as it involves the effective utilisation of existing resources, in this case, the informal networks cultivated by project-based firms. However, because this capability was universally adopted across all project-based firms, as noted by the present study's participants, it does not appear to serve as a source of competitive advantage. Consequently, it is proposed that the relations intelligence capability, or the ability to sense in markets where formal data are limited, should be reclassified as an ordinary or foundational capability, rather than being considered a DC.

Many participants in the present study reported that formal information sources in sub-Saharan Africa are unreliable or non-existent. This is aligned with the view of Liedong et al. (2020), who characterise institutional voids as contexts lacking information intermediaries. It also aligns with the view of Muriti et al. (2020), who explain that sub-Saharan Africa's institutional environment creates conditions where informal mechanisms replace absent formal market supporting mechanisms. Andrews and Luiz (2024) made the same observations, illustrating that firms operating in sub-Saharan Africa must gather data through both informal and formal channels. This finding indicates that, in the sub-Saharan Africa context, relations-based sensing is essential to firm survival, but is insufficient to create competitive advantage. Therefore, this capability is an OC.

6.4.1.2 *Rapid decision-making*

Gupta et al. (2024) describe seizing as the crucial phase when firms act upon opportunities or threats identified during sensing. According to Teece (2023), decisiveness, which is making decisions rapidly or mobilising resources quickly is a key aspect of this ability (Joussen et al., 2025). Broke and Hitt (2024), who classify agility as a meta-DC, define it as the ability to renew and remain flexible

without sacrificing efficiency. Brock and Hitt (2024) aver that this ability allows international firms to respond rapidly to changes in environments and to mobilise resources and capabilities quickly, providing them with significant advantages.

Participants in the present study revealed that most project-based firms maintain flat organisational structures, enabling decentralised and autonomous decision-making at regional and country levels. This allows these firms to make rapid decisions in responding to changes in these specific countries or regions. This aligns with the study of Choi et al. (2018), which demonstrates that successful project-based firms implement decentralised organisational structures with regional-based management structures in order to respond rapidly to local market changes and cultural needs. This allows business units to operate independently rather than through centralised control, thus enhancing agility and responsiveness (Choi et al., 2018).

However, while Choi et al. (2018) present these structures as characteristic of successful project-based firms, the findings of the present study suggest that, in sub-Saharan Africa contexts, rapid decision-making is an OC rather than a source of advantage. The volatile, unpredictable, and heterogeneous business environments in sub-Saharan Africa require all firms, not just high performers, to act swiftly. Participants described how decisions need to be made quickly to seize opportunities or address threats, indicating that speed of decision-making is a baseline requirement for survival, rather than a source of competitive advantage. It is therefore suggested that agility, more specifically the ability to make rapid decisions, which is considered a DC in stable markets, be reclassified as an OC in the context of sub-Saharan Africa.

While the present study's findings show that informal sensing and rapid decision-making have become common capabilities in sub-Saharan Africa, as they were found to be present across all project-based firms as survival requirements, other capabilities yielded more variability in participants' views with regard to quality and execution. Pitelis et al. (2025) illustrate that OCs help firms do things correctly, while DCs enable them to do things correctly when it is most effective, thereby creating competitive advantage through superior timing and execution.

6.4.2 Capabilities that should Remain Dynamic in Sub-Saharan Africa

This section examines the capabilities that the study suggests should retain their dynamic nature because they continue to significantly influence firm performance despite the challenging sub-Saharan Africa environment.

6.4.2.1 *Strategic partnership orchestration*

While the importance of establishing local partnerships was noted by all participants in the present study, the quality of partnership execution demonstrated significant heterogeneity. Andrews and Luiz (2024) identify the building of skills to successfully collaborate with local partners and stakeholders as a development critical for multinational firms to navigate sub-Saharan Africa's institutional voids. The present study found that several of the project-based firms had experienced repeated failures in establishing local partnerships. Other firms, through experience, had established successful local partnerships, suggesting they had developed effective capabilities for partner selection, management, and value creation. This variation in outcomes indicates that the capability of strategic partnerships orchestration is not present across all project-based firms and provides a competitive advantage only to those that engage in such orchestration, reaffirming its classification as a DC.

6.4.3 Concluding Remarks with regard to RQ3

The findings of the present study challenge assumptions in DC literature by comparing universal capability classifications with more specific contexts. Teece (2018) developed a DC framework around the fundamental distinctions that DCs enable firms to maintain competitive advantage and are fundamentally forward-looking, influencing how firms operate in the future. However, the findings of the present study suggest that specific DCs that provide a competitive advantage in certain institutional settings may shift to OCs in volatile contexts characterised by institutional voids.

The context-dependence aligns with existing theory on how businesses are shaped by the environments in which they operate. Liedong et al. (2020) discuss how the understanding of institutional voids and their impact on business is evolving. Environments previously classified as lacking institutions are now recognised as more institutionally complex. As research on firms operating in institutionally void or

complex environments develops, it is entirely plausible that these firms would follow a different set of capability rules compared firms operating in institutionally supportive environments. Brock and Hitt (2024) acknowledge that firms operating across geographically and institutionally diverse regions require more robust DCs to manage this institutional heterogeneity. However, the findings of the present study extend this argument by suggesting that the classification of DC versus OC should depend on context. Pitelis et al. (2025) define DCs as those that enable firms to perform tasks correctly and at appropriate times. Perhaps there is no appropriate time in institutionally complex contexts. Rather, DCs need to be operationalised continuously, which suggests that their classification should be changed from dynamic to ordinary.

These findings indicate that contexts lacking institutional presence might need a three-tier capability framework, one extending beyond the typical binary classification in DC view theory of DCs and OCs (Pitelis et al., 2025). First, OCs remain basic across contexts, representing routine activities that Teece (2018) describes as operational or zero-order capabilities. These capabilities are easily imitated and, in some cases, outsourced (Li et al., 2025). For example, in the present study, fundamental business functions such as contract administration, documentation, and HR administration are classified as OCs. Second, what the present study considers survival capabilities are capabilities that may offer a competitive advantage in stable markets but become baseline requirements for survival in countries with institutional voids. Key examples from this study include relational intelligence capability, which is the ability to gather information from informal sources, and rapid decision-making. Third, true DCs continue to provide a competitive edge, even in volatile, diverse environments, through superior execution. A key example from the present study is strategic partnership orchestration, defined as the capability to select, manage, and learn from local partnerships. This framework contributes to DC theory by demonstrating that the strategic value of capabilities varies depending on environmental complexity, with institutional voids and complexity raising the threshold for what constitutes a competitive advantage.

Inclosing, DCs in project-based firms must be understood within their institutional context, and the findings of the present study providing significant evidence to suggest a recalibration of traditional capability classifications. This concludes the discussion of the study's findings. Chapter 7 synthesises the study's theoretical and

empirical contributions into actionable conclusions, addresses the study's limitations, and provides recommendations for both practitioners navigating sub-Saharan African markets and scholars advancing DC theory in emerging markets.

7. CONCLUSIONS AND RECOMMENDATIONS

The successful and sustainable operation of project-based firms, which often operate in the construction, engineering, and extractive industries, plays a crucial role in the economic development of sub-Saharan Africa. However, countries in this region are plagued by institutional voids and complexity, which makes doing business significantly more difficult and uncertain. For firms to remain competitive and survive, they need to develop DCs that enable them to adapt to volatile market conditions (Brock & Hitt, 2024). Teece (2018) identifies DC as capabilities that help firms to create and sustain competitive advantage and enable them to deliver superior long-term performance (Gölgeci et al., 2019). Despite this recognition of DCs' importance, limited research has examined how these capabilities manifest in institutionally complex environments, particularly within the unique context of project-based work in developing markets.

This research aimed to address an identified gap in DC theory related to project-based firms in sub-Saharan Africa, where market conditions and business practices differ from those of the more stable markets often examined in DC studies. The study was driven by three interconnected research questions. First, it investigated whether project-based firms operating in diverse environments characterised by institutional voids and complexity have developed a distinctive set of DCs. Second, since most existing DC frameworks suggest these capabilities arise through organisational routines and stable, future-focused processes, this study examined how project-based firms cultivate these DCs despite the inherently temporary and fragmented nature of project-based work. Third, the research aimed to provide a more context-specific reclassification of the key DCs identified.

To address these questions, in this qualitative research data were gathered via semi-structured interviews with key decision-makers from various successful project-based firms operating in sub-Saharan Africa. Rigorous thematic analysis was performed, which uncovered several important insights related to each research question. The study identified four primary DCs for project-based firms' success in sub-Saharan Africa:

1. relational intelligence, using informal networks for sensing in data-scarce environments;

2. strategic partnership orchestration, which is the ability to select, manage, and learn from local partnerships, developed through trial and error;
3. adaptive human capital systems that prioritise cultural intelligence and adaptability over technical skills while maintaining a stable core team that rotates across projects; and
4. decentralised operations and learning structures, operationalised through flat hierarchies with autonomous country managers, coupled with direct feedback loops that enable rapid decision-making and knowledge transfer.

The research revealed that capabilities traditionally classified as dynamic in stable markets, such as informal sensing and rapid decision-making, appear to function as more foundational capabilities, those necessary for survival in sub-Saharan Africa. Importantly, project-based firms seem to overcome the temporary–permanent dilemma through two key mechanisms: embedding knowledge within mobile core personnel rather than rigid structures, and utilising flat organisational structures with short feedback loops that transform project knowledge into firm-level capabilities.

This chapter synthesises these findings into actionable conclusions that directly answer the three research questions. It examines the study's theoretical contributions to DC theory, particularly regarding how institutional complexity shapes capability development and classification in project-based contexts. The chapter presents practical recommendations for managers and stakeholders of project-based firms operating in similarly challenging environments. This is followed by a review of the limitations of the study and potential directions for future research.

7.1 RESEARCH CONTEXT AND SIGNIFICANCE

This study addresses a significant gap in the literature on project-based firms operating in sub-Saharan Africa. While substantial research exists on DCs, the capabilities firms develop to maintain competitiveness, most studies focused on stable, developed markets. Limited research has examined how DCs function in unstable, emerging markets characterised by institutional voids and complexity, and even fewer studies have explored their application within project-based firms operating in sub-Saharan Africa.

The gap is particularly critical given the unique challenges project-based firms face in this context. First, these firms must navigate the temporary–permanent dilemma, transitioning unique project-level learnings into organisation-wide, permanent capabilities despite often operating through multiple business models. Second, because sub-Saharan Africa economies are relatively small and cannot independently support large multinational firms, project-based firms typically operate across multiple jurisdictions. This creates a dual capability challenge: firms must not only develop capabilities to navigate institutional complexity within individual countries but also build robust capabilities to manage institutional heterogeneity across the region.

Besides providing the present study with purpose and relevance, addressing the identified research gap was considered important for several reasons, detailed below.

First, the findings enhance knowledge of DCs by testing and refining current theory within the context of project-based firms in sub-Saharan Africa. Specifically, the findings show that, in sub-Saharan Africa, project-based firms have developed DCs to overcome institutional voids, complexity, political uncertainty, volatility, and infrastructure gaps, which are more human-relational and experience-focused. This contrasts with more stable markets, where DCs might be more structural or formalised.

Second, the findings offer practical value for project-based firms operating in sub-Saharan Africa. For firms in the region, investing in people and relationships seems more valuable than focusing solely on structure and process. This insight could help guide these firms to make better-informed decisions and develop policies or practices aimed at developing and retaining human capital and experience. This is important because, these research findings are useful and actionable, as opposed to being purely theoretical.

Lastly, this research is significant because it adds to the knowledge base that could help project-based firms, which are vital in several key sectors essential to development in sub-Saharan Africa, become more sustainable. This may aid the region's development and ultimately improve the lives of people in sub-Saharan Africa. The next section provides a summary of the main findings.

7.2 PRINCIPAL FINDINGS

The principal findings are discussed according to three foci, namely the DCs of project-based firms in sub-Saharan Africa. the development and deployment of these capabilities, and, finally, the classification of DCs for this region.

7.2.1 Dynamic Capabilities Characterising Successful Project-based Firms in sub-Saharan Africa

In answering RQ1, the study identified four interconnected DCs vital to sustained operations of project-based firms in sub-Saharan Africa: relational intelligence capability, strategic partnership orchestration, adaptive human capital systems, and decentralised learning structures. Notably, these capabilities emerged consistently across all participant interviews, highlighting their relevance to project-based firms doing business in the region. An important observation was the recurring human and relational themes across all four DCs. This highlights how important people and relationships, both internally and externally, are to project-based firms' success in the region.

The findings reveal how relational intelligence, which manifests through informal, trust-based networks with clients, suppliers, and peers, is critical in gathering information about volatile and uncertain markets. Strategic partnership orchestration, defined as the ability to select, manage, and learn from local partners, is typically developed through trial and error. Without this capability, project-based firms struggle to find solutions to the volatility and uncertainty that is sensed through informal networks. It was found that project-based firms have developed adaptive human capital systems by prioritising cultural intelligence, humility, and adaptability when selecting staff. Firms then retain this trusted core team, enabling experiential knowledge, managing partners, and informal network data gathering to be retained through personnel mobility. Finally, these core teams are deployed and managed within decentralised and flat hierarchies, termed 'centralised operations and learning structures' in this study. By allowing managers within this core team to act autonomously and report directly to senior leadership, project-based firms can leverage the retained knowledge through rapid decision-making and agility while facilitating the transfer of project-level learning into organisational knowledge.

In this study, these capabilities are interpreted as context-specific adaptations for project-based work in the institutional voids of sub-Saharan Africa markets. They closely align with the sensing, seizing, transforming triad, with relational intelligence resembling the core sensing mechanism, and strategic partnership orchestration facilitating seizing through localisation (Teece, 2018). While decentralised operations and learning structures help enable organisational transformation through agility and adaptability, adaptive human capital systems serve as a microfoundation, underpinning all three. This highlights the mutually reinforcing nature of these capabilities; any of these capabilities operating in isolation would be less effective.

7.2.2 Development and Deployment of Capabilities

The research revealed that project-based firms address the temporary–permanent paradox through three primary mechanisms. To counter the volatile, varied nature of project-based work, project-based firms embed capabilities within mobile personnel rather than rigid organisational structures. This people-centric approach allows firms to retain capabilities developed through experience and project learning. The findings suggest that, by embedding capabilities in mobile personnel, successful project-based firms can take advantage of the repeated exposure gained through multiple, often unique, projects. The knowledge gained from this repeated exposure is then shared across the organisation, which has a flat hierarchical structure, through team feedback sessions, with deliberate efforts to prevent operational silos. This enables the continuous evolution, refinement, and deployment of capabilities.

These findings challenge Teece's (2018) emphasis on organisational routines and stable processes for DC development. The findings suggest that project-based firms successfully navigate the temporary–permanent dilemma by investing in human capital, thereby creating stability through personnel continuity rather than structural consistency. This allows firms to use project temporality to accelerate capability development, rather than it being an obstacle, by providing multiple learning opportunities across varied institutional contexts. It was concluded that this people-centric approach is well-suited to heterogeneous and often chaotic environments, where rigid, standardised processes might impede agility and flexibility.

7.2.3 Reclassification of Dynamic Capabilities in sub-Saharan Africa Context

The findings revealed that capabilities traditionally classified as dynamic in stable institutional contexts may function differently in sub-Saharan African markets and could therefore be reclassified. Relational intelligence for sensing opportunities and threats, typically considered a DC, was noted in all participant interviews. Similarly, all participants also mentioned rapid decision-making and organisational agility. This suggests that these two capabilities may be fundamental requirements for survival in sub-Saharan Africa, rather than sources of competitive advantage. Conversely, strategic partnership orchestration showed significant variation in quality and execution across firms, with some firms experiencing multiple failures and others considerable success. This suggests that this capability may not be a prerequisite for survival in sub-Saharan Africa, but instead, is a source of competitive advantage.

These findings provide evidence that capability classifications may be context-dependent rather than universal. Capabilities that might provide a competitive advantage in stable institutional contexts could be a baseline requirement for market entry and survival in environments characterised by institutional voids. This suggests that what constitutes 'dynamic' fundamentally depends on environmental context, with adaptability itself potentially becoming standardised in volatile environments. Furthermore, capabilities that enable superior execution and timing across all institutional contexts appear to constitute true DCs in sub-Saharan Africa.

The subsequent section details the contributions of this research.

7.3 THEORETICAL CONTRIBUTIONS

7.3.1 Contribution to Dynamic Capabilities Theory

The research makes three theoretical contributions to DC theory. First, it challenges Teece's (2018) emphasis on DCs being rooted in organisational routines and stable processes. The findings demonstrate that DCs can develop and persist through a retained core of mobile personnel, rather than rigid organisational structures, particularly in project-based contexts. The research proposes extending DC theory by emphasising that human-based microfoundations are at least as important as

process-based microfoundations, especially for project-based organisations in institutionally complex environments.

Secondly, the study introduces a three-tier capability framework that goes beyond the traditional binary classification often associated with DC theory. This framework categorises capabilities as ordinary capabilities (routine functions), survival capabilities (those that offer a competitive edge in stable markets but become essential for survival in institutionally complex environments), and true dynamic capabilities. The latter enables firms to gain a competitive advantage even in complex institutional settings, where mere survival can lead to success. This supports Brock and Hitt's (2024) argument, which questions the universality of capability classifications, and highlights the influence of environmental context and institutional heterogeneity. Additionally, institutional voids seem to raise the bar for what should constitute a competitive advantage, indicating that certain dynamic capabilities need to be performed continuously rather than just at the right moment, as Pitelis et al. (2025) suggest.

7.3.2 Contribution to Project-based Firm Literature

The research makes a theoretical contribution to project-based firm literature. It proposes a people-centric approach to the temporary–permanent dilemma, which Denicol and Davies (2022) identify as the challenge project-based firms face in transferring project-level learnings to permanent, organisation-level experience. This approach suggests that structural instability does not inhibit capability and knowledge development when human capital stability is maintained. The findings demonstrate, as Hermano and Martin-Cruz (2020) argue, which specific DCs could help to address knowledge loss upon completion of temporary projects.

This research reinterprets project temporality as a strategic advantage rather than a challenge. It reveals that fragmented project structures can actually speed up capability and knowledge growth when proper retention mechanisms are used. Project-based work seems to facilitate compressed evolutionary learning cycles across different institutional settings, allowing for faster development compared to the slow organisational learning achieved through formal routines.

Finally, the study also makes a contribution towards addressing the critical lack of research on project-based firms in African contexts identified Ochie et al. (2022). By

providing a comprehensive exploration of project-based firms operating across multiple sub-Saharan Africa jurisdictions, the research demonstrates how context influences the development of capabilities. It highlights some of the capabilities that project-based firms have developed and how they influence business operations, thereby providing a base for future research in this domain. The next section offers recommendations for practice.

7.4 PRACTICAL IMPLICATIONS AND RECOMMENDATIONS

Several practical implications and recommendations emerged from this study. When working in sub-Saharan Africa, focusing on investing in human capital and relationships seems to offer greater value than building rigid structures and formalised processes. To develop human capital, managers of project-based firms should prioritise hiring individuals with cultural intelligence who display respect, humility, and adaptability. These qualities should be deemed more important than technical skills.

In a project-based environment, knowledge and capabilities are most effectively embedded in people, rather than organisational structures. Managers of project-based firms need to make a concerted effort to retain key personnel and rotate them across projects, in order to enhance the preservation of experiential knowledge and to facilitate knowledge transfer.

The ability to select, manage, and learn from local partnerships provides a competitive edge. For decision-makers involved in project-based firms, a more proactive stance on local partnerships is recommended, one involving deliberate efforts to identify suitable partners before potential projects are mapped out. It is important to carefully assess the reasons for involving local partners to ensure their alignment with the company's strategy and values. Ideal partners can also help identify opportunities and threats, not just provide market- or project access. Nevertheless, managers must be aware that certain partnerships may fail; however, their ability to learn from these failures and apply what has been learned in the future is critical.

In sub-Saharan Africa, formal market data are often unreliable, outdated, or non-existent. Project-based firms overcome this by leveraging informal networks. Managers of these should recognise that, without informal networks, successful

market entry and survival are unlikely. To establish strong informal networks, investments should be made to build trust-based relationships with suppliers, clients, market peers, and, in some cases, government officials. Managers should also strategically assign personnel to countries before securing any work, to develop networks and gain understanding environment.

Flat and decentralised hierarchical structures, where country- and regional managers have considerable autonomy but report directly to senior managers overseeing multiple regions, facilitate quick decision-making and knowledge-sharing. Managers should trust their team members to make decisions and grant them sufficient independence. Country managers must have direct access to senior decision-makers. It is crucial to actively prevent the formation of division or geographical silos that could hinder knowledge flow within these structures. To address this, platforms such as regular feedback sessions, group conferences, or informal gatherings should be established to accelerate feedback and promote project- and cross-divisional sharing.

The next section reviews the limitations of the study, followed by recommendations for future research.

7.5 LIMITATIONS OF THE STUDY

The present study was limited to certain sectors, coupled with restrictive criteria for participation, which may limit the transferability of the findings (Bouncken et al., 2025; Johnson et al., 2020), as they may not adequately represent all project-based firms operating in sub-Saharan Africa. For example, countries with limited infrastructural development or mining operations may be excluded from this study, even if the project-based firms operating there have developed a unique set of DCs.

In addition, the study looked only at firms currently operating in sub-Saharan Africa, thereby excluding those that had failed or exited the market. This introduces a bias toward successful firms, which limited the study's ability to determine if the identified capabilities are necessary, sufficient, or simply correlate with success. Additionally, the study's definition of success was not objectively measured; it was simply assumed that firms still operating were successful.

The purposive sampling may have introduced bias through the present researcher selecting mining, engineering and construction companies. Participant selection was

further limited by the fact that gaining access to these businesses can be difficult. Snowball sampling may have exaggerated this bias and resulted in a homogenous sample. Another limitation is the study's monomethod qualitative approach and cross-sectional time horizon, which did not allow for quantification or the tracing of developments over time.

7.6 RECOMMENDATIONS FOR FUTURE RESEARCH

The first recommendation is an extension of the sampling to include firms that have failed in or exited sub-Saharan Africa. This could help eliminate the effects of success- or survivorship bias, potentially providing better illumination of capabilities that differ between successful and failed project-based firms. This would provide additional insights for classifying DC in this context. Furthermore, adopting a longitudinal time horizon, in which project-based firms are observed over time, may provide additional insight into how capabilities evolve. It may provide more practical examples of how firms develop and deploy capabilities to overcome specific institutional voids. Such research could follow a mixed-methods approach to augment the qualitative findings with quantitative measures.

Future research could also include comparisons of other contexts and industries, such as telecommunications, healthcare, education, and information technology could offer additional insights into how specific DCs may differ depending on the type of project, product, or service. This could assist future project-based firms that may not relate to the resource-intensive nature of engineering, mining and construction. Investigating how these DCs vary across individual country contexts would add depth to the body of knowledge in this domain. For instance, the types of institutional voids might differ between Anglophone, Francophone, and Lusophone regions. Similarly, variations could exist between resource-rich and resource-poor countries, or between countries where construction is either widespread or limited.

7.7 CONCLUDING REMARKS

The present study reveals a profound paradox: the capabilities that confer competitive advantage in stable markets may serve as survival requirements in institutionally fragile environments. This dynamic suggests an intriguing competitive reversal. Project-based firms that master sub-Saharan Africa's institutional complexity may develop a set of capabilities that become a formidable competitive

advantage when deployed in stable markets. Firms' adept at navigating institutional voids, building informal trust-based intelligence networks, and orchestrating partnerships amid uncertainty possess capabilities that competitors in stable markets may never need to develop. With the right expansion strategy, the institutional muscle built in sub-Saharan Africa may prove transferable and potent elsewhere.

REFERENCE LIST

- Abe, G. N. (2024). The Challenges and Opportunities of Emerging Markets for Firm Internationalization: The Case of MTN Nigeria. *African Journal of Management and Business Research*, 14(1), 124-147.
- Abutabenjeh, S., & Jaradat, R. (2018). Clarification of research design, research methods, and research methodology: A guide for public administration researchers and practitioners. *Teaching Public Administration*, 36(3), 237-258.
- Adomako, S., Shenkar, O., Liu, X., Amankwah-Amoah, J., & Ahsan, M. (2024). Editorial on doing business in Africa: Navigating opportunities and challenges in Africa's emerging markets. *Journal of International Management*, 30(6), 101189. DOI:[10.1016/j.intman.2024.101189](https://doi.org/10.1016/j.intman.2024.101189)
- Agnihotri, A., Bhattacharya, S., Yannopoulou, N., & Thrassou, A. (2023). Foreign market entry modes for servitization under diverse macroenvironmental conditions: taxonomy and propositions. *International Marketing Review*, 40(4), 561-584.
- Alam, M. K. (2021). A systematic qualitative case study: Questions, data collection, NVivo analysis and saturation. *Qualitative Research in Organizations and Management: An International Journal*, 16(1), 1-31.
- Andrews, L. R., & Luiz, J. M. (2024). Dynamic capabilities and the management of institutional voids: A case study of intra-African internationalization. *Thunderbird International Business Review*. <https://doi.org/10.1002/tie.22427>
- Asongu, S. A., & Odhiambo, N. M. (2020). *Challenges of doing business in Africa: A systematic review*. AGDI Working Paper No. WP/18/057. African Governance and Development Institute (AGDI), Yaoundé. <https://www.econstor.eu/bitstream/10419/204979/1/1664480110.pdf>
- Barbosa, M. T., & Carvalho, M. M. (2024). Toward a multilevel framework of dynamic capabilities through the lens of project management, project portfolio management, and project-based organizations. *Project Management Journal*, 55(3), 247-263.

- Boafo, J., Obodai, J., Stemn, E., & Nkrumah, P. N. (2024). The race for critical minerals in Africa: A blessing or another resource curse? *Resources Policy*, 93, 105046. DOI: [10.1016/j.resourpol.2024.105046](https://doi.org/10.1016/j.resourpol.2024.105046)
- Boso, N., Adeleye, I., Ibeh, K., & Chizema, A. (2019). The internationalization of African firms: Opportunities, challenges, and risks. *Thunderbird International Business Review*, 61(1), 5-12.
- Bouncken, R. B., Czakon, W., & Schmitt, F. (2025). Purposeful sampling and saturation in qualitative research methodologies: Recommendations and review. *Review of Managerial Science*, 1-37. <https://doi.org/10.1007/s11846-025-00881-2>
- Braun, V., & Clark, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77. <https://doi.org/10.1191/1478088706qp063oa>
- Brock, D. M., & Hitt, M. A. (2024). Making sense of dynamic capabilities in international firms: Review, analysis, integration, and extension. *International Business Review*, 33(1), 102260. DOI: [10.1016/j.ibusrev.2024.102260](https://doi.org/10.1016/j.ibusrev.2024.102260)
- Cavusgil, S. T., & Deligonul, S. Z. (2025). Dynamic capabilities framework and its transformative contributions. *Journal of International Business Studies*, 56(1), 33-42.
- Chakamera, C., & Alagidede, P. (2018). The nexus between infrastructure (quantity and quality) and economic growth in Sub Saharan Africa. *International Review of Applied Economics*, 32(5), 641-672.
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.
- Denicol, J., & Davies, A. (2022). The megaproject-based firm: Building programme management capability to deliver megaprojects. *International Journal of Project Management*, 40(5), 505-516.
- Dunwoodie, K., Macaulay, L., & Newman, A. (2023). Qualitative interviewing in the field of work and organisational psychology: Benefits, challenges and guidelines for researchers and reviewers. *Applied Psychology*, 72(2), 863-889.

- Ekanem, S. (2025, August 5). South Africa's Shoprite pulls out of Ghana and Malawi, marking 7th African market exit. *Africa Business Insider*.
<https://africa.businessinsider.com/local/markets/south-africas-shoprite-pulls-out-of-ghana-and-malawi-marking-7th-african-market-exit/ef3t0ch>
- Farquhar, J., Michels, N., & Robson, J. (2020). Triangulation in industrial qualitative case study research: Widening the scope. *Industrial Marketing Management*, 87, 160-170.
- Games, D. (2011). Doing business in post-conflict and fragile states: Challenges and risks. *Development Bank of Southern Africa*.
<https://www.dbsa.org/sites/default/files/media/documents/2022-11/Doing%20Business%20in%20Post-conflict%20and%20Fragile%20States%20-%20202011.pdf>
- Gemünden, H. G., Lehner, P., & Kock, A. (2018). The project-oriented organization and its contribution to innovation. *International Journal of Project Management*, 36(1), 147-160.
- Gölgeci, I., Assadinia, S., Kuivalainen, O., & Larimo, J. (2019). Emerging-market firms' dynamic capabilities and international performance: The moderating role of institutional development and distance. *International Business Review*, 28(6), 101593. DOI: [10.1016/j.ibusrev.2019.101593](https://doi.org/10.1016/j.ibusrev.2019.101593)
- Gupta, N., Sardana, D., & Lee, R. (2024). Dynamic capabilities that matter for business failure versus survival. *Industrial Marketing Management*, 116, 40-50.
- Harrison III, R. L. (2013). Using mixed methods designs in the Journal of Business Research, 1990–2010. *Journal of Business Research*, 66(11), 2153-2162.
- Hernano, V., & Martín-Cruz, N. (2020). The project-based firm: A theoretical framework for building dynamic capabilities. *Sustainability*, 12(16), 6639. DOI: [10.3390/su12166639](https://doi.org/10.3390/su12166639)
- Hernano, V., Martín-Cruz, N., & Pajares, J. (2022). The effect of project management dynamic capabilities on firm performance. *Baltic Journal of Management*, 17(2), 266-284.

- Johnson, J. L., Adkins, D., & Chauvin, S. (2020). A review of the quality indicators of rigor in qualitative research. *American Journal of Pharmaceutical Education*, 84(1), 7120. DOI: [10.5688/ajpe7120](https://doi.org/10.5688/ajpe7120)
- Joussen, T. P., Kanbach, D. K., & Kraus, S. (2025). Enabling strategic change toward resilience: A systematic review from a dynamic capabilities perspective. *Strategic Change*, 34(3), 373-405.
- Kurtmollaiev, S. (2020). Dynamic capabilities and where to find them. *Journal of Management Inquiry*, 29(1), 3-16.
- Lester, J. N., Cho, Y., & Lochmiller, C. R. (2020). Learning to do qualitative data analysis: A starting point. *Human Resource Development Review*, 19(1), 94-106.
- Li, B., Teece, D. J., Baskaran, A., & Chandran, V. G. R. (2025). Dynamic knowledge management: A dynamic capabilities approach to knowledge management. *Technovation*, 147, 103316. <https://doi.org/10.1016/j.technovation.2025.103316>
- Liedong, T. A., Peprah, A. A., Amartey, A. O., & Rajwani, T. (2020). Institutional voids and firms' resource commitment in emerging markets: A review and future research agenda. *Journal of International Management*, 26(3), 100756. <https://www.sciencedirect.com/science/article/pii/S1075425318303405>
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Sage. [https://doi.org/10.1016/0147-1767\(85\)90062-8](https://doi.org/10.1016/0147-1767(85)90062-8)
- Løbner, K., & Goduscheit, R. C. (2022). A configurational approach to capabilities of business model innovation: Insights from a project-based firm. *Creativity and Innovation Management*, 31(4), 722-739.
- Mandishekwa, R. (2021). Rethinking mining as a development panacea: an analytical review. *Mineral Economics*, 34(1), 151-162.
- Manning, S. (2017). The rise of project network organizations: Building core teams and flexible partner pools for interorganizational projects. *Research Policy*, 46(8), 1399-1415.

- Matysiak, L., Rugman, A. M., & Bausch, A. (2018). Dynamic capabilities of multinational enterprises: The dominant logics behind sensing, seizing, and transforming matter! *Management International Review*, 58(2), 225-250.
- McNulty, B. A., & Jowitt, S. M. (2021). Barriers to and uncertainties in understanding and quantifying global critical mineral and element supply. *IScience*, 24(7).
<https://www.sciencedirect.com/science/article/pii/S258900422100777X>
- Mhonyera, G., Coetzee, Z., & Bezuidenhout, H. (2020). Effective strategies followed by multinational enterprises expanding into Africa. *Journal of Economic and Financial Sciences*, 13(1), 1-12.
- Murithi, W., Vershinina, N., & Rodgers, P. (2020). Where less is more: Institutional voids and business families in sub-Saharan Africa. *International Journal of Entrepreneurial Behavior & Research*, 26(1), 158-174.
- Nason, R., & Bothello, J. (2023). Far from void: How institutions shape growth in informal economies. *Academy of Management Review*, 48(3), 485-503.
- Nkemgha, G. Z., Nchofoung, T. N., & Sundjo, F. (2023). Financial development and human capital thresholds for the infrastructure development-industrialization nexus in Africa. *Cities*, 132(4), 104108. DOI: [10.1016/j.cities.2022.104108](https://doi.org/10.1016/j.cities.2022.104108)
- Ochie, C., Nyuur, R. B., Ludwig, G., & Cunningham, J. A. (2022). Dynamic capabilities and organizational ambidexterity: New strategies from emerging market multinational enterprises in Nigeria. *Thunderbird International Business Review*, 64(5), 493-509.
- Oguji, N., Degbey, W. Y., & Owusu, R. A. (2021). International joint ventures research on Africa: A systematic literature review, propositions, and contextualization. *Thunderbird International Business Review*, 63(1), 11-26.
- Oguji, N., & Owusu, R. A. (2021). Market entry into Africa: Acquisitions and international joint ventures. Studies of foreign firms' market entry strategies, challenges, and performance in Africa. *Thunderbird International Business Review*, 63(1), 5-9.

- Owusu-Manu, D. G., Jehuri, A. B., Edwards, D. J., Boateng, F., & Asumadu, G. (2019). The impact of infrastructure development on economic growth in sub-Saharan Africa with special focus on Ghana. *Journal of Financial Management of Property and Construction*, 24(3), 253-273.
- Pemsel, S., & Söderlund, J. (2025). Governance and creativity in project-based organizations: Archetypes and agenda for future research. *Project Management Journal*, 56(1), 141-157.
- Pitelis, C. N., Teece, D. J., & Yang, H. (2024). Dynamic capabilities and MNE global strategy: A systematic literature review-based novel conceptual framework. *Journal of Management Studies*, 61(7), 3295-3326.
- Pitelis, C., Wang, C. L., Hughes, M., & Ambrosini, V. (2025). Towards a better understanding of the interrelationship between dynamic capabilities and international entrepreneurship. *International Business Review*, 34(2), 102387. DOI: [10.1016/j.ibusrev.2024.102387](https://doi.org/10.1016/j.ibusrev.2024.102387)
- Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management*, 8(3), 238-264.
- Rahman, M. M. (2023). Sample size determination for survey research and non-probability sampling techniques: A review and set of recommendations. *Journal of Entrepreneurship, Business and Economics*, 11(1), 42-62.
- Rashid, Y., Rashid, A., Warraich, M. A., Sabir, S. S., & Waseem, A. (2019). Case study method: A step-by-step guide for business researchers. *International Journal of Qualitative Methods*, 18, 1-13. DOI: [10.1177/1609406919862424](https://doi.org/10.1177/1609406919862424)
- Saunders, M., & Lewis, P. (2018). *Doing research in business and management* (2nd ed.). Pearson.
- Schoemaker, P. J. H., Heaton, S., & Teece, D. (2018). Innovation, dynamic capabilities, and leadership. *California Management Review*, 61(1), 15-42.
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40-49.

- Teece, D. J. (2023). The evolution of the dynamic capabilities framework. *Artificiality and Sustainability in Entrepreneurship*, 113, 238.
https://doi.org/10.1007/978-3-031-11371-0_6
- Wang, D., Cui, L., Vu, T., & Feng, T. (2022). Political capital and MNE responses to institutional voids: The case of Chinese state-owned enterprises in Africa. *Organization Studies*, 43(1), 105-126.
- Zahra, S. A., Petricevic, O., & Luo, Y. (2022). Toward an action-based view of dynamic capabilities for international business. *Journal of International Business Studies*, 53(4), 583-600.

Appendix A

Semi – Structured Interview Guide

Dynamic Capabilities in Project-Based Firms Operating Across Sub-Saharan Africa

Interview Guide

- **Company and Person Context:**

1. Describe the company's operations and what types of projects it executes?
2. In what countries or regions does the company have experience in Sub-Saharan Africa?
3. How do the business environments differ between countries and regions?
4. What role do you play in the company?
5. What countries or regions do you have experience in Sub-Saharan Africa?
6. How would you describe the environment and the level of institutional support (legal systems, government policy and engagement) in these countries or regions

- **Dynamic Capability – Sensing:**

1. How does the firm stay aware of changes in the environment or market?
2. What does the company do to identify new opportunities or potential risks?
3. Can you provide an example where sensing a change early helped the business or project?
4. How does the company gather valuable information to remain aware of potential changes?

- **Dynamic Capability – Seizing:**

1. How do you decide which new projects or clients to focus on?
2. Similarly, how do you decide which threats to focus on?
3. How do you choose the right teams or people for a new opportunity?
4. Have you ever decided not to pursue an opportunity? Why?

- **Dynamic Capability – Transforming:**

1. Can you describe a time when the company had to change to deal with a challenge or opportunity?
 2. How does management drive these changes across a company or project?
 3. Have you had to shift your focus to new areas based on environmental changes?
 4. Have you had to adjust your resources based on environmental changes?
 5. How open is the company to trying new things? (systems and tools, ways of working)
- **Temporary Permanent Dilemma:**
 1. How do lessons from current or past projects help to plan the future?
 2. How does your company ensure knowledge and experience is retained?
 3. How does your company ensure this knowledge and experience is shared with the organisation?
 4. Are there formal systems in place to support this learning or transfer of knowledge?
 5. What challenges has the company faced in building long-term capabilities or skills from temporary projects?
 - **Institutional Voids and Regional Adaptation:**
 1. What institutional challenges (logistical, regulatory, legal) has the company encountered in Sub-Saharan Africa?
 2. How has the business adapted itself to address these voids in the business environment?
 3. Are there any practices or strategies which the company considers unique to operating successfully in the region?
 - **Human Capital and Resource Development:**
 1. How does the company attract, develop and retain skilled personnel for projects in challenging or remote places?
 2. What role does local knowledge play in successfully executing these projects?
 3. What role does local knowledge play in building a firm's capabilities?
 4. Has the company made many deliberate efforts to build or enhance certain skills or capabilities within the workforce?
 - **Reflections and strategic outlook:**

1. Does the company's way of operating give it an edge over competitors in the region? If so, how?
2. Have you ever attempted to recreate or apply a firm's capabilities in another region with similar challenges? What was the result?
3. Looking ahead, what capabilities do you believe the firm needs to develop to remain competitive.

Appendix B

Ethical Clearance Application and Approval

GIBS ETHICAL CLEARANCE APPLICATION FORM 2025/26

G. APPROVALS FOR/OF THIS APPLICATION

When the applicant is a student of GIBS, the applicant must please ensure that the supervisor and co-supervisor (where relevant) has signed the form before submission

STUDENT RESEARCHER/APPLICANT:

29. I affirm that all relevant information has been provided in this form and its attachments and that all statements made are correct.

Student Researcher's Name in capital letters: GRANT PRIOR

Date: 24 Jul 2025

Supervisor Name in capital letters: PROF MARK BUSSIN

Date: 24 Jul 2025

Co-supervisor Name in capital letters:

Date: 18 Jul 2025

Note: GIBS shall do everything in its power to protect the personal information supplied herein, in accordance to its company privacy policies as well the Protection of Personal Information Act, 2013. Access to all of the above provided personal information is restricted, only employees who need the information to perform a specific job are granted access to this information.

Decision:

Approved

REC comments:

Good luck with your research.

Date: 28 Jul 2025

Appendix C

INFORMED CONSENT LETTER

Research Title: Dynamic Capabilities in Project-Based Firms Operating Across Sub-Saharan Africa

Researcher: Grant Prior

Contact Number: +27 (0) 64 756 4777, **Email:** 24072606@mygibs.co.za

Researcher: Dr Mark Bussin

Email: drBussin@mweb.co.za

Dear Participant,

Study Purpose

I am conducting research on how project-based firms develop capabilities to operate successfully across Sub-Saharan Africa. This research is part of my MBA degree at University of Pretoria's Gordon Institute of Business Science

What is involved

You are invited to participate in a 45-60 minute interview about your company's operations and strategies in Sub-Saharan Africa. Topics will include how your firm identifies opportunities, responds to challenges, and adapts to different business environments in the region.

Your Rights

- **Participation is voluntary** - You can withdraw at any time without penalty
- **Confidentiality** - Your identity will remain anonymous in all reports.
- **Recording** - The interview will be audio recorded with your permission
- **Data protection** - All information gathered within the interview process will be kept confidential and secure

Publication

This research may be published as an academic report, journal article, book, or disseminated through platforms such as podcasts or radio interviews. Your identity and

any identifying information will remain completely anonymous and confidential in all forms of publication and dissemination.

Benefits and Risks

There are no direct benefits or risks to you. Your insights will contribute to understanding how firms can operate successfully in challenging environments.

ETHICAL APPROVAL

This research has been approved by the GIBS Masters Research Ethics Committee.

CONSENT

I have read and understood this information. I agree to participate in this research study.

Participant Name: _____

Participant Signature: _____ **Date:** _____

Researcher Signature: _____ **Date:** _____

INFORMED CONSENT LETTER

Research Title: Dynamic Capabilities in Project-Based Firms Operating Across Sub-Saharan Africa

Researcher: Grant Prior

Contact Number: +27 (0) 64 756 4777, **Email:** 24072606@mygibs.co.za

Researcher: Dr Mark Bussin

Email: drBussin@mweb.co.za

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ETHICAL APPROVAL

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CONSENT

I have read and understood this information. I agree to participate in this research study.

Participant Name: _____

Participant Signature: _____ **Date:** _____

Researcher Signature: _____ **Date:** _____