



UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

Understanding Transitioning from Traditional Business Analysis to Agile Business Analysis:
The Case of South African Banks

A dissertation presented to the
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By

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ABSTRACT

Customer needs are rapidly changing, and organisations strive to respond accordingly. Thus, many organisations explore innovative approaches to address their needs and challenges. Some innovations include developing new technologies, products, and service offerings.

These innovative approaches need organisations to inspect, adapt and adopt new ways of working and moving (transitioning) from the traditional business analysis approach to the agile one. However, the transition has its challenges. Some challenges are either unknown or unclear to many organisations that intend to transition from a traditional business analysis approach to an agile one. Some of the challenges organisations faced are struggling to reduce uncertainty, and lack of quicker response time. This has been attributed to a lack of empirical evidence or limited terms of reference. This was the main motivation for this study.

This study aimed to help gain a deeper understanding of transitioning from traditional business analysis to agile business analysis in the context of large South African organisations. Qualitative research methods were employed to achieve this aim. Two financial services (banking) organisations were selected as cases using the case study method. This allows activities to be understood in their natural settings and from two perspectives. The use of two cases helped with the generalisation of some of the findings. Participants were selected from both organisations based on the criteria. The semi-structured interview technique was used to gather data to a point where new information was not forthcoming.

The moments of translation from the Actor Network Theory (ANT) were used to analyse the data collected. Primarily, this is because ANT focuses on relationships, interactions between actors, and how negotiations shift from one point to another. Thus, the theory was crucial in achieving the aim of the study. Using the theory for analysis helps reveal the benefits and challenges of transitioning from a traditional approach to agile business analysis. This includes the interactions between human and non-human actors, leading to transition. Furthermore, the findings were interpreted to understand better how the factors influence transitioning from a traditional business analysis approach to an agile business analysis in both organisations.

The study provides insights into the challenges and benefits of transitioning from traditional business analysis to an agile approach. The challenges emanate from various factors. For example, change to resistance and lack of understanding of lean requirements documentation in organisations. This is attributed to business analysts still using traditional business analysis mindset, advancement of individual analysis approach within the teams, lack of buy-in and support from business stakeholders and senior management to ensure quicker delivery, and unclear roles and responsibilities within teams, etc. and also the study highlighted various

benefits associated with transitioning to agile business analysis which include improved collaborations that encourage the team to function as a unit, improved visibility and transparency within teams, increase productivity and quicker time to market of the organisation's product and services.

Despite the comprehensiveness of the study, there were limitations, which are highlighted. Additionally, based on the findings and interpretation, a conclusion was drawn that there is a need for further research. Thus, areas of further are proposed.

The study made contributions from theoretical and practical standpoints. Theoretically, the study contributes by adding to the existing literature in the areas of business process and project methodological approach from both academic and business perspectives. Additionally, it advances the use of actor-network theory as a lens in information systems research. Practically, the findings from the study can be used to guide policy and strategy development on the implementation of agile business analysis in an organisation.

DEDICATION

To God almighty, I dedicate this study. For you are my guidance and strength and have never forsaken me.

To my Family

This study is dedicated to my late father and brother, Mr. Isaac Iyamu and Aimuamwonsa Iyamu, respectively. Thank you, Dad, for teaching me that the sky is not the limit. Dad, wherever you are, I know you are proud of me. I sincerely appreciate your love and support for me until you passed.

To my mom, Christine Iyamu, I will always appreciate you for your unconditional love and care. To my siblings, particularly Professor Tiko, Anthony, and Ikpomwenosa, thank you for the never-ending love and support you have shown me. Thank you for always being there for me, especially when I need you the most.

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ACRONYMS

Acronyms	Description
ANT	Actor Network Theory
BA	Business Analysts
BABOK	Business Analysis Body of Knowledge
BPM	Business Process Management
BRS	Business Requirements Specification
CIO	Chief Information Officer
CRM	Customer Relationship Management
CoE	Centre of Excellence
CTO	Chief Technology Officer
ECM	Enterprise Content Management
GT	Group Technology
IIBA	International Institute of Business Analysis
IS	Information Systems
IT	Information Technology
JSE	Johannesburg Stock Exchange
NSX	Namibian Stock Exchange
NEB	Northeast Bank
Nwow	new ways of working
OPP	Obligatory Passage Point
PM	Project Manager
PO	Product Owner
RAD	Rapid Application Development
ROI	Return On Investment
RUP	Rational Unified Process
RTE	Release Train Engineer
SAFe	Scaled Agile Framework
SDLC	System Design Lifecycle
SM	Scrum Master
SWB	Southwest Bank
TQM	Total Quality Management
UCT	University of Cape Town

CHAPTER ONE

Introduction

1. Introduction

This chapter introduces the thesis. The study sets out to understand the challenges South African banks face in transitioning from traditional business analysis to agile business analysis, which includes identifying and documenting the challenges attributable to the transitioning process.

The chapter is organised into eight main sections. First, it discusses the scope and context within which the study is conducted. Next, it presents the background of the study—the third research problem. Sections 4 and 5 present the research purpose, objectives, and questions. Justification for the study is provided in the sixth section. The structure of the thesis is presented in the seventh section, and finally, a summary of the chapter is provided.

1.1. Background

Continually, organisations strive to be profitable and sustainable (Anggreini et al., 2022; Milani, 2019). As a result, some organisations explore approaches that can provide them with a competitive advantage. Business analysis as a practice plays a crucial role in defining business requirements and finding the most suitable business solution (Gobov et al., 2020).

Thus, business analysis is an essential approach to analysing an organisation. This is primarily because business analysis practices are crucial drivers enabling and supporting an organisation in enhancing processes and events (IIBA, 2015). Business analysis is interdisciplinary and allows analysis to be successfully conducted (Chatterjee et al., 2023; Hrabal et al., 2021; Muntean & Militaru, 2022). Some empirical studies have revealed that an organisation has significant repercussions if appropriate business analysis practices are not followed (Bell et al., 2022; Palepu et al., 2020).

The traditional business analysis approach is a practice that comprises a linear process whereby all phases in the analysis process are performed in sequence, and the process relies on predictable, repeatable tools and methods to meet solution requirements (Gill et al., 2018; Hauke-Lopes et al., 2023; Wiesche, 2021). The primary challenge with this approach is that it cannot accommodate business requirement changes during project lifecycles. The traditional business analysis approach is slow and derails competitiveness (Palepu et al., 2020; Prakash & Agarwal, 2013). In addressing these challenges, some South African banking organisations opt to transition into the agile approach (Alkema et al., 2017).

Agile business analysis seeks new methods to address business challenges and promote the improvement of organisational business processes (IIBA, 2015). According to Abdelghany et al. (2019), the agile business analysis approach is chosen for analysis because of its great unpredictability and creativity. The agile business analysis approach is more dynamic (Amorim et al., 2021; Cao et al., 2009). For South African banking organisations, it is therefore critical to transition into agile business analysis practice to maintain market share and develop a stronger price position, including the ability to create new and innovative products (Mara & Madupe, 2022). As a result of competitiveness, requirements are continuously changing. South African banking organisations are expected to respond quickly to ever-changing business and customer requirements without disrupting the efficiency and effectiveness of ongoing operations and processes (Alkema et al., 2017; Johnston & Gill, 2017). Anggreini et al. (2022) affirmed that transformation positively affects organisational processes and performance. Increasingly, many organisations believe that the traditional approach is a challenge if they are to be globally competitive. Thus, South African banking organisations are transitioning into the agile approach. However, the transitioning process is a challenge, and it is critical for South African Banking organisations to succeed because failure to succeed will be detrimental to the organisation's sustainability and competitiveness (Johnston & Gill, 2017; Wayi)

1.2. Problem Statement

The transition from traditional business analysis to an agile method often creates uncertainty within an organisation. The transition can lead to unfeasible expectations, which can be detrimental for senior management and other stakeholders in managing the transitioning processes and uncertainty (IIBA, 2015). Thus, if an organisation is to reduce the uncertainty and improve efficiency including quicker response time, it must ensure that the transitioning journey is carefully planned and effectively executed (Girvan & Paul, 2017). With agile adoption, there are implications for organisations that are rigidly embedded in traditional business analysis methodology, hence, the challenges of transitioning to agile business analysis persists (Girvan & Paul, 2017).

1.3. Research Purpose and Objectives

The study aims to understand and explain the challenges organisations face when transitioning from traditional business analysis to agile business analysis practice in the context of South African organisations. From the research problem, the following objectives are articulated:

- i. To understand the challenges of transitioning from traditional business analysis to agile business analysis practice.
- ii. To understand the benefits associated with transitioning from traditional business analysis to agile business analysis practice.
- iii. To understand how the challenging factors influence and manifest in transitioning from traditional business analysis to agile business analysis practice.

1.4. Research Questions

In achieving the research objectives as stated above, the following research questions were formulated:

Primary research question:

What benefits and challenges are associated with transitioning from traditional business analysis to agile business analysis practice?

The sub-questions are as follows:

- i. How do the challenging factors influence and manifest in transitioning from traditional business analysis to agile business analysis practice?
- ii. What are the benefits of transitioning from a traditional business analysis approach to an agile business analysis practice?

1.5. Scope and Context

This study follows an interpretivist philosophy, employing an inductive method, which allows for subjectivism and gathering participants' views, opinions, and experiences (CIRT, 2016). The study employs multiple cases. Two banking organisations are used as cases in the study. South African banks have only recently transitioned to an agile business analysis. As highlighted in the literature, they are exposed to the challenges and hurdles that hinder transitioning to an agile business analysis.

1.6. Research Justification

By examining the empirical evidence, this research will advance the knowledge of transitioning from traditional business analysis to agile business analysis practice, thus contributing to the business analysis body of knowledge. Additionally, it enhances organisations' understanding of the significant implications of transitioning from traditional business analysis to agile

business analysis practice, particularly within banking institutions and from South African perspectives.

The gap identified in the literature is the limited amount of evidence documenting the challenges organisations face when transitioning from traditional business analysis to an agile business analysis approach. This study identifies the challenges in transitioning to an agile business analysis approach, which can assist organisations to take a holistic approach towards business analysis.

Organisations can also benefit by enhancing what has been accomplished, avoiding errors, and using the study recommendations. In addition, those who have been sceptical of transitioning from traditional business analysis to an agile business analysis approach can learn and gain from the empirically-based evidence that emerged from the findings of this study.

1.7. Structure of the Dissertation

The dissertation consists of eight chapters. Chapter One introduces the entire content of the dissertation.

Chapter Two presents a review of the literature relating to this study. It commences by offering a broad theoretical outline of business analysis practices, traditional business analysis practices, and an overview of the agile business analysis approach, including its principles, the methods adopted, and how they came to be applied in situation development. Additionally, the chapter focuses on agile business analysis, the roles of different stakeholders within the agile business analysis, as well as the challenges faced when transitioning to an agile business analysis approach.

Chapter Three presents the ANT. The theory underpins the study.

Chapter Four presents the research design and the approach followed in the study. This includes the techniques and methods applied in the data collection and analysis.

Chapter Five presents the case description of the study.

Chapter Six follows with the findings and discussion, which is based on addressing the research questions and preparation for transitioning to agile business analysis.

Chapter Seven discussion and interpretations of the study.

Chapter Eight presents the Research Limitations, Conclusion and Recommendations for Future Research.

1.8. Summary

This chapter provides details about the study. Comprehensively, it explains the phenomenon being studied and details the specific problem. It highlights the approach whereby the objectives of the study were achieved. Also, the benefits of the study are briefly discussed in the form of justification and contribution to the body of knowledge. In the end, it outlines the structure of the dissertation to understand its flow. The next chapter provides a review of the literature relating to the study.

CHAPTER TWO

The Literature Review

2.1. Introduction

This chapter reviews the literature concerning the phenomenon being studied, focusing on gaining a deeper understanding of transitioning from traditional business analysis to agile business analysis practices in organisations. Thus, the literature review focuses on the study's core aspects: the traditional business analysis approach, agile business analysis practices, and transitioning.

The chapter is organised into six main sections. The first section introduces the chapter. The second and third sections discuss the traditional business analysis approach and agile business analysis practices. A comparative overview between the traditional approach and the agile approach is presented in the fourth section. The fifth section discusses transitioning, focusing on traditional business analysis approaches and agile business analysis practices. The last section gives a summary of the chapter.

2.2. Traditional Business Analysis

Business analysis can be defined as enabling change in an organisation by describing the requirements and proposing solutions that deliver benefits to the stakeholders (IIBA & AgileAlliance, 2017). In other words, business analysis is a concept that explicitly applies knowledge that guides businesses over unknown, undefined territory and helps them arrive at their desired goal or state (Paul et al., 2010). Thus, business analysis values are the achievements of its benefits, new opportunities and solution identification, cost reduction, and knowing the required capacities and organisation structure. Proper and effective use of business analysis practices ensures that an organisation achieves these benefits, eventually enhancing how it conducts its business (IIBA & AgileAlliance, 2017).

Business analysis practices refer to the concepts and solutions, which are business process mapping and redesigning or re-engineering, which are the critical features of business analysis (Hoque, 2019). These concepts and solutions employ methods, such as the traditional approach, to fulfil a business's needs and requirements. The traditional approach includes the waterfall method, the V-model, a rational unified process (RUP), and rapid application development (RAD) (Mirza & Datta, 2019; Mokhtar & Khayyat, 2022; Shaikh & Abro, 2019). The highly disciplined analysis approach entails thoughtful planning, which proceeds logically (Ciric Lalic et al., 2022; Conforto & Amaral, 2016; Serrador & Pinto, 2015).

Traditionally, a business analysis approach followed a very rigid and firm process and had a series of steps, with the final deliverables only being realised at the end of the analysis (Prakash & Agarwal, 2013). The traditional approach is comprehensive and has been used for decades (Ciric Lalic et al., 2022). In general, it integrates an understanding of the organisational components and knowledge of IT systems that are beneficial in defining how they can help one another. This integration gives organisations a competitive advantage by enabling growth (Baker, 2015). Also, the traditional business analysis approach focuses on processes rather than products (Kashyap, 2021).

The traditional approach has many characteristics (Prakash & Agarwal, 2013) identified various characteristics of the traditional business analysis approach. The first indicated that the traditional business analysis is a sequential approach; nothing can be changed based on new business requirements (Girvan & Paul, 2017). All business requirements must be documented and signed off before the next design phase begins. Waterfall, which followed the traditional business analysis approach, adopted the System Design Lifecycle (SDLC) model, the phases of which are sequential and proceed through planning, analysis, design, and implementation stages (Balaji & Murugaiyan, 2012).

Traditional business analysis claims that the stakeholders ultimately know and can clearly define the system's functionalities (Girvan & Paul, 2017). It does not recognise the unpredictability characteristics in product development that the agile business analysis approach seeks to address. In traditional business analysis methodology, fixed roles with clearly defined responsibilities enable systematic planning and stability (Paul et al., 2010). Team capacities are well-documented and predictable. Business analysis progress can be evaluated via milestones promoting reliable budget and time estimation. The traditional business analysis approach, in its sequential flow, does not need enormous resources, and the quality and functionalities of the product are underpinned by proper business requirement documentation (Prakash & Agarwal, 2013).

Despite its comprehensiveness and having been employed for many decades, the traditional approach does have weaknesses. The approach is challenged with complex problems that hinder project progress and quick completion (Wiesche, 2021). Some weaknesses lie in its failure to accommodate business requirements and changes (Prakash & Agarwal, 2013).

There are failures due to not addressing challenges that occur in the current stage before proceeding to the next stage. The traditional approach's highly sequential and rigid nature can be viewed positively and negatively (Chugh & Chugh, 2023). Ciric Lalic et al. (2022) argued that the sequential flow can be challenging.

2.3. The Practice of Agile Business Analysis

Agile business analysis originated from the software development industry as a new way of eliciting and managing software development (Podeswa, 2017). Agile business analysis is the practice of business analysis in an agile environment with an agile mindset (IIBA & AgileAlliance, 2017). Additionally, the agile business analysis process is usually defined through the “Manifesto” (Burga et al., 2022; Diebold et al., 2019; Gandomani & Nafchi, 2016), which includes the ability to embrace change, produce incremental deliveries, keep rapid track of business and technology changes, and the critical roles of human actors (Laanti et al., 2013). According to the Agile Manifesto, adaptability is a characteristic of agile software development. It pays attention to the flexibility needed in the natural aspect of software development (Kakar, 2023).

Agile methodologies prioritise individuals and interactions over processes (tools); supporters of agile methodology prefer working with software rather than comprehensive documentation. They prefer collaboration over negotiating contracts and prioritise responsiveness to changes over predefined plans (Kakar, 2023). In the agile method, various approaches, processes, and tools can be employed by business analysts (BAs) to help deliver business benefits and values. However, many involved actors adopt an agile business analysis mindset to help deliver expected results (Ramos, 2021).

In contrast to the traditional approach, the agile approach is flexible and encourages creativity, which motivates many individuals and teams (Conforto & Amaral, 2016; Mokhtar & Khayyat, 2022; Shaikh & Abro, 2019). In some quarters, the agile approach is considered capable of overcoming some of the weaknesses of traditional processes (Chugh & Chugh, 2023; Mirza & Datta, 2019).

Blais (2018) identifies several characteristics associated with agile business analysis. He stated that agile business analysis must adapt to the business process and the software development approach. Agile business analysis is goals-orientated. It adds value to organisations through problem-solving, system thinking abilities and an ability to see the big picture (Blais, 2018).

Agile methodology focuses on the desire to learn and the ability to adapt rather than focusing on deadlines quickly. Some key attributes of agile business analysis are collaboration, respect, and communication (Ramos, 2021). As illustrated in Figure 2.1 below, agile business analysis allows for flexibility and continuous change within an organisation (Badakhshan et al., 2020). One of the strengths of the agile business analysis method is that it is intended to enable

autonomous decision-making process automation (Salyakhova & Panfilov, 2022). Agile analysis helps maximise value to business stakeholders (Kose, 2021). Kakar (2023) explains how the agile business analysis process harnesses change to improve an organisation's competitiveness.

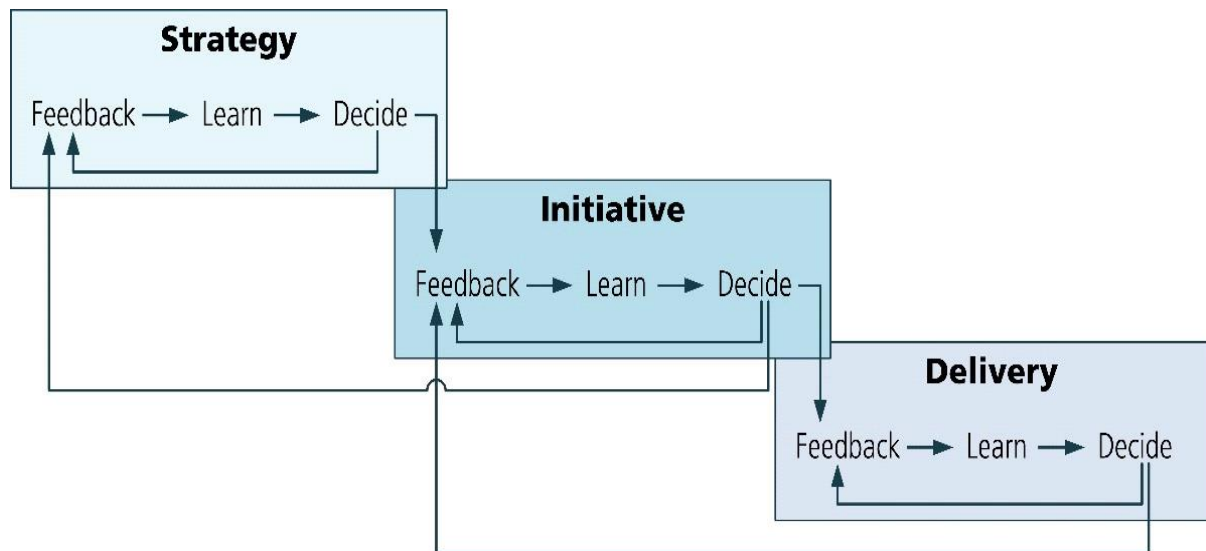


Figure 2.1: Agile Business Analysis (IIBA & AgileAlliance, 2017)

As shown in Figure 2.1 above, agile business analysis practice is a logical approach acknowledging that stakeholders and development teams do not understand everything that must be done beforehand, nor do they know that things are expected to change and will change as the analysis proceeds. The agile process embeds internal and external dynamics (Badakhshan et al., 2020). Kose (2021) suggested that agile practices prove their value by providing continuous feedback and enabling an organisation's constant learning, improvement, and integration capabilities. This includes changing requirements at any time (Kakar, 2023). This approach requires a series of cognitive negotiation shifts among human actors and their mindsets. The approach promotes positive and healthy organisational communication, bringing valuable insights into processes and conversations (Fatima & Awan, 2023). This creates a helpful team culture where the actors define and accept responsibility and accountability.

A primary component of agile business analysis is one's mindset. An agile mindset drives the thinking and behaviour of an agile business analyst professional. As depicted in Figure 2.2 below, conversations matter in an agile business analysis mindset, focusing more on people and communication than processes and documentation (IIBA & AgileAlliance, 2017). In an agile business analysis mindset, change is expected, and change is harnessed for the benefit of the stakeholders (Saboe, 2017). Adopting an agile mindset and its theory, BAs develop

skills in communication and collaboration, patience and tolerance, and adaptability (IIBA & AgileAlliance, 2017)

The Agile Business Analyst Mindset

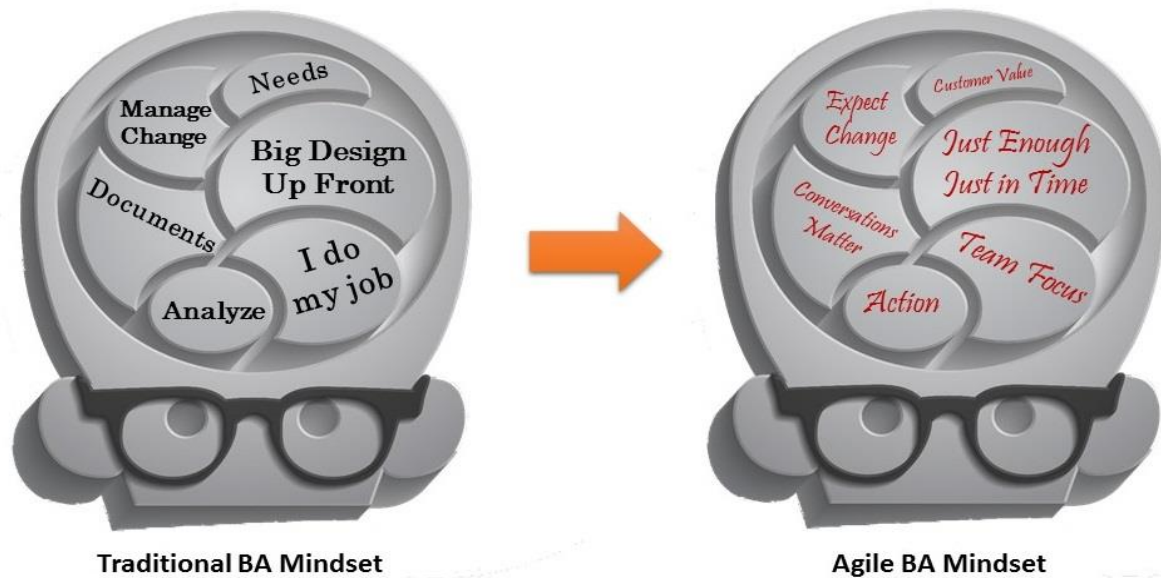


Figure 2.2: Agile Business Analysis Mindset (Saboe, 2017)

In past decades, the adoption of agile business analysis has grown significantly. This could be attributed to its principles, which allow organisations to respond quickly to customers and market demands, improve business process efficiency, and improve customer satisfaction (Podeswa, 2017). The paradigm has moved away from the traditional approach and towards agile business analysis practices, bringing traditional business analysis to a crossroads. The challenge primarily comes from the agile business analysis mindset, built on the Agile Manifesto and its principles (IIBA & AgileAlliance, 2017). Considering the rapidly changing environment that businesses operate in, traditional BAs' skills still hold good today. It is all about being more customer-centric and providing value-added delivery, where products must meet or exceed customers' expectations. Businesses must now deliver on this promise by adopting an agile mindset (Saboe, 2017).

2.4. Traditional vs Agile Business Analysis

This study section compares the traditional approach and analysis with agile business analysis. The section only simplistically highlights the difference between the concepts to support the arguments in sections 2.2 and 2.3. New business analysis practices are necessary for an organisation to fit within the new business analysis culture (Gabryelczyk & Roztock, 2018; Sandeep & Ravishankar, 2018). These practices continue identifying and harnessing objectives, developing valuables, enabling beneficial products, and reducing the market cost.

Table 2.1 below shows some differences between traditional and agile business analysis approaches.

Table 2.1: Traditional vs Agile Software Development (Nerur et al., 2005)

	Traditional Business Analysis	Agile Business Analysis
Fundamental Assumptions	Business requirements are fully defined and predictable and can be successful due to thorough and detailed planning	High-quality, adaptive business requirements and products can be built by small teams using the principles of continuous design improvement development and testing based on continuous stakeholder feedback
Control	Process centric	People centric
Management Style	Command-and-control	Leadership-and-collaboration
Knowledge Management	Explicit	Tacit
Role Assignment	Individual-favours specialisation	Self-organising teams - encourages role interchangeability
Communication	Formal	Informal
Customer's Role	Important	Critical
Project Cycle	Guided by tasks or activities	Guided by product features
Development Model	Life cycle model (Waterfall, Spiral or some variation of those)	The evolutionary-delivery model
Desired Organisational Form/Structure	Mechanistic (bureaucratic with high formalisation)	Organic (flexible and participative encouraging cooperative social action)
Technology	No restriction	Favours object-orientated technology

To fairly compare traditional business analysis methodology with the agile business analysis approach (Mahalakshmi & Sundararajan, 2013) proposed that elements such as ceremonies, roles, meetings, and artefacts should be discussed. Agile business analysis teams should comprise various roles: product owner/business analyst, project manager/scrum master, stakeholder, development team and release train engineer (RTE). In some organisations, the role of BAs has been transitioned to a Product Owner (PO) role (Podeswa, 2017).

In traditional business analysis, the business analyst is critical in analysing and documenting business requirements and obtaining approvals (Mirza & Datta, 2019; Mokhtar & Khayyat,

2022). In an agile environment, BAs are no longer required to formulate heavy business requirements documents. Instead, BAs are expected to create user stories using tools like Jira or Confluence. The PO leads the project in an agile environment and sets its primary goals and objectives (Agile Alliance, 2020). The PO manages the product roadmap and prioritises the backlog. The PO also describes the project version and manages the stakeholders. BAs are regarded as a proxy PO (Podeswa, 2017).

In traditional business analysis projects, the project manager (PM) is critical in getting estimates and obtaining approvals. In an agile environment, that role for a PM no longer exists. The traditional PM role has been replaced by the Scrum Master (SM) (Kashyap, 2021). The SM is responsible for organising activities in the agile team. The SM receives directions from the PO, communicates them to agile team members, and ensures that every team member performs their tasks and achieves their goals and objectives. The SM assists the agile team in removing impediments and ensuring that all agile ceremonies are observed positively and proactively (Wufka & Ralph, 2015).

In an agile project, the stakeholders identify the customer or end-user's requirements and provide feedback to the PO throughout the project (Conforto & Amaral, 2016). The stakeholders may not be directly involved in the product development processes, but they play a critical role that affects the decisions and work of the team (Wufka & Ralph, 2015). Also, agile processes promote sustainability and scalability (Kakar, 2023). The development team plays a critical role in an agile environment. They are individuals tasked with responsibilities that include but are not limited to product development. The development team is a cross-functional team that commits to translating requirements into tangible products for stakeholders or end-users.

2.5. 'Transitioning from traditional to agile business analysis' Approach

Business analysis involves coordinating transformation from the current to the desired state (Nica et al., 2021). This includes effective coordination of stakeholders' needs, elicitation and analysis of business requirements, and management of projects.

Transitioning refers to a process in which an activity moves from a current state to a desired state for sustainable and progressive purposes (Shobaki et al., 2018). The transition from traditional to agile functioning is often viewed from two different angles, which increases the challenges encountered. Sandeep and Ravishankar (2018) suggested that transitioning, on the one hand, exposes employees to a variety of work-life challenges and, on the other,

presents the opportunity for development. Gandomani and Nafchi (2016) pointed out that human-related challenges are the most critical during the transition.

Transitioning arises in some organisations because traditional and agile business analysis approaches have different strengths and weaknesses. Also, it is not about which methodology is superior to the other (Andrei et al., 2019; Bell et al., 2022). This study does not focus on comparison, either. It is important to note that both approaches can be used separately or complementarily to elicit and analyse business requirements. However, in some quarters, traditional business analysis is considered best suited at an enterprise-wide level, i.e., at the strategic level of analysis (Girvan & Paul, 2017). This is mostly in situations where high-level control and management decisions are needed.

In many organisations across sectors, the practice of the agile approach is growing, which entails transitioning away from the traditional approach (Mahadevan et al., 2015). However, there are challenges with transitioning. Some of the challenges have been identified in previous studies, such as Dikert et al. (2019) and Gandomani and Nafchi (2016). Another significant unknown factor is how the factors manifest, which is the focus of this study. Also, transitioning to agile business analysis practice is difficult because of its unique challenges.

Transitioning is more complex than is often thought or envisaged because of its components, which include people, skills, and processes. Mahadevan et al. (2015) stated categorically that transition is not easy and that the traditional approach differs from agile practices in several ways. The transition process requires a change in the skills needed from personnel, including upper management and managers (Shobaki et al., 2018). It also involves various moments or stages, which include translations of requirements (technical and business) and allocation of tasks. Sandeep and Ravishankar (2018) suggested that engagement with employees towards inclusiveness and collective capabilities can be intensive during the transition, which can be attributed to various causes. Traditional BAs could face challenges transitioning from a traditional business analysis approach to agile business analysis practices (Ramos, 2021).

Due to its complexity, the transition presents various challenges to many enterprises (Abdel-Basset et al., 2020). Due to the complexity associated with human nature, transitioning from traditional to agile business practices is increasingly challenging (Dikert et al., 2016; Ghobadi & Mathiassen, 2016; Patanakul & Rufo-McCarron, 2018).

Gandomani and Nafchi (2016) stated that many studies have reported human-related challenges as significant challenges in transitioning from traditional business analysis to agile business analysis practices. Mindset is a considerable challenge, and it causes a lack of

cognitive fit and confusion and makes negotiation more difficult (Nelson et al., 2009). Transitioning from traditional business analysis to agile business analysis practices can be a positive and motivating experience for many organisations (Diebold et al., 2019).

Thus, organisational roles during transitioning are critical from buy-in and support perspectives (Jovanović et al., 2017). Shobaki et al. (2018) explained that the transition can require extensive organisational structure and business process changes. Management commitment to the IT project teams encourages accountability while transitioning to agile business analysis practices (Burga et al., 2022). Gabryelczyk and Roztocki (2018) stated that the transition should also consider factors such as the environment, the impact on external stakeholders' ownership and the context of implementation. Inclusiveness and joint responsibility significantly contribute to an organisation's transition (Mahadevan et al., 2015). Tensions inevitably accompany transitioning from traditional business analysis to an agile business analysis approach (Burga et al., 2022).

The processes decided on during the transition can make it a worthwhile experience in an organisation (Diebold et al., 2019). As identified by Patanakul and Rufo-McCarron (2018), managing the challenges, such as development and changes to business process standards can change employees' attitudes and resistance to change. Transitioning from traditional business analysis to agile business analysis practices is influenced by many circumstances, including organisational structure (Jovanović et al., 2017), however, the factors that manifest or influence these challenges are unknown (Abdel-Basset et al., 2020; Burga et al., 2022; Sandeep & Ravishankar, 2018). Organisations transitioning from traditional business analysis to agile should start with the most complex and problematic projects (Fowler & Highsmith, 2001).

Competition is global, business opportunities are dynamic (Ciric et al., 2019), that is why transitioning to agile business analysis allows organisations quicker response to ever-changing market conditions (Shah, 2023). Today's business environment is highly characterised by volatility, uncertainty, complexity, and ambiguity (Bennett & Lemoine, 2014). These various factors have resulted in organisations looking for a new way of practicing business analysis in order to keep up with the fast pace of changing customer demands.

The key factors that influence why an organisation needs to transition to agile business analysis at an organisational level include fast paced, ever-changing customer requirements and constantly evolving business environments which means that the old, inflexible, and rigid ways of practicing business analysis are no longer sustainable and competitive (Shah, 2023).

Agile business analysis helps organisations to plan, deliver, and track progress across teams within the organisation (Bennett & Lemoine, 2014). Transitioning to agile business analysis is a step in the right direction.

2.6. Summary

This chapter reviews the study's core aspects, as mentioned in the introduction. The review provides historical balance to support the arguments for and against agile analysis by commenting on previous and current studies on the subject under review.

The next chapter focuses on the theory and extends the literature that underpins the study, namely the ANT.

CHAPTER THREE

The Actor Network Theory

3.1. Introduction

This research focuses on transitioning from traditional business analysis to agile business analysis. The ANT was selected to underpin the study. With the help of ANT, a conceptual framework was developed. Thus, the chapter presents a discussion of ANT in the context of this study and the conceptual framework for analysis and interpretation purposes. The chapter describes the ANT developed by Michel Callon and Bruno Latour in the 1980s and the research methodology from which it was derived. Much technological research excludes social research studies, but ANT provides several concepts for investigating the network of social (human) actors and technical (non-human) elements.

3.2. The Actor Network Theory: An Overview

ANT is a sociotechnical theory developed by French sociologists Michel Callon and Bruno Latour in the 1980s (Akrich, 2023; Callon, 1990; Latour, 1987). The theory focuses on shift negotiation (Callon, 1990), making it worthwhile to employ the theory as a lens to gain a deeper understanding of the negotiation that happens when companies transition from traditional business analysis to agile business analysis. Some of the main components of ANT are actors, actor networks and translation (Akrich et al., 2011).

ANT offers a research context that allows for the investigation of phenomena that were developed dynamically and socially (Latour, 1999). ANT attempts to logically identify the forces at play between different components with variable levels of flexibility. (Callon, 1990) stated that ANT is a theoretical framework and a logical approach to studying technological achievements by ranking human and non-human elements equally. In addition, ANT is concerned with the interactions between the actors who work together to attain specific objectives and form an actor network in the process (Law et al., 2012). Business analysis practices occur in dynamic environments that involve complex interactions between heterogeneous objects, referred to as heterogeneous engineering. These heterogeneous components may be considered organisations, people, processes, and technologies (Nijland, 2004).

Actor: In ANT, actors are defined as any entity that can make a difference (Callon, 1990). Actors constitute human and non-human actors, such as machines and processes (Latour, 1996). The transitioning process requires human and non-human actors to transition from

traditional to agile business analysis (Callon, 1990), providing reasons why neither human nor non-human actors are superior to other network actors. However, that position has been described as dehumanisation (Walsham, 1995); the roles of both human and non-human actors are essentially critical (Heeks & Stanforth, 2015) in transitioning from traditional business analysis to agile business analysis.

Thus, some of the themes of ANT are human beings, objects, and processes, which are essential in attaining dispute resolution within business analysis. In doing so, the actors are described by the network they belong to (Sage et al., 2011), which is vital to the events and activities discussed during negotiation. Callon (1990) stated that a crucial element of an ANT is that the actants are critical in the moment of 'translation'. Humans must formulate the requirements (Hauke-Lopes et al., 2023) that define the process in 'transitioning from traditional to agile business analysis'. The transition entails software like Jira and Confluence (Mokhtar & Khayyat, 2022; Shaikh & Abro, 2019) and computers.

Actor-network: It is consistently emphasised that a key feature of ANT is that the actors include both human beings and non-human actors together, comprising a network (Callon, 1990; Latour, 1996). An actor network is a group of actors with a common interest (Callon, 1990), consisting of people, an organisation, computers, and standards (Iyamu, 2021). From the viewpoint of ANT, actors and the network are inseparable (Callon, 1990; Latour, 1996).

Similarly, humans cannot be separated from their tasks in transitioning from traditional business analysis to agile business analysis in an organisation. This account helps examine the interaction between the actors (Heeks & Stanforth, 2015; Iyamu & Mgudlwa, 2021). The formation of a network is only the beginning of the journey; it is not an end in itself because the network can become unstable or unreliable (Tatnall, 2005).

Therefore, a mechanism for managing and maintaining stability is needed to avoid unstable and risky situations due to individuals' differences. ANT helps to constitute the mechanics of power as things happen during the construction and maintenance of networks (Tatnall, 2010). From an empirical perspective, Gao (2005) argued that ANT is the most helpful method for determining the interests of human and non-human actors in a network to foster stability.

Actor-network durability is the bonds that hold it together and are drawn from aligned interests (Tatnall, 2010). Hence, it is argued that ANT can provide the capability to interpret whether, within the networks, the interactions between the actors contribute to attaining business analysis objectives, which benefit from the translation process.

3.2.1. The Translation Process

In ANT, translation is the process that allows human actors to focus exclusively on common goals and interests (Callon, 1990; Iyamu, 2021). Although translation allows for multiple realities and viewpoints, it identifies a common goal within a network (Calhau et al., 2021), enabling centredness in transitioning from traditional business analysis to agile business analysis. The process is referred to as the four moments of translation. As shown in Figure 3.1 below, the four translation moments are problematisation, interessement, enrolment, and mobilisation (Callon, 1990).

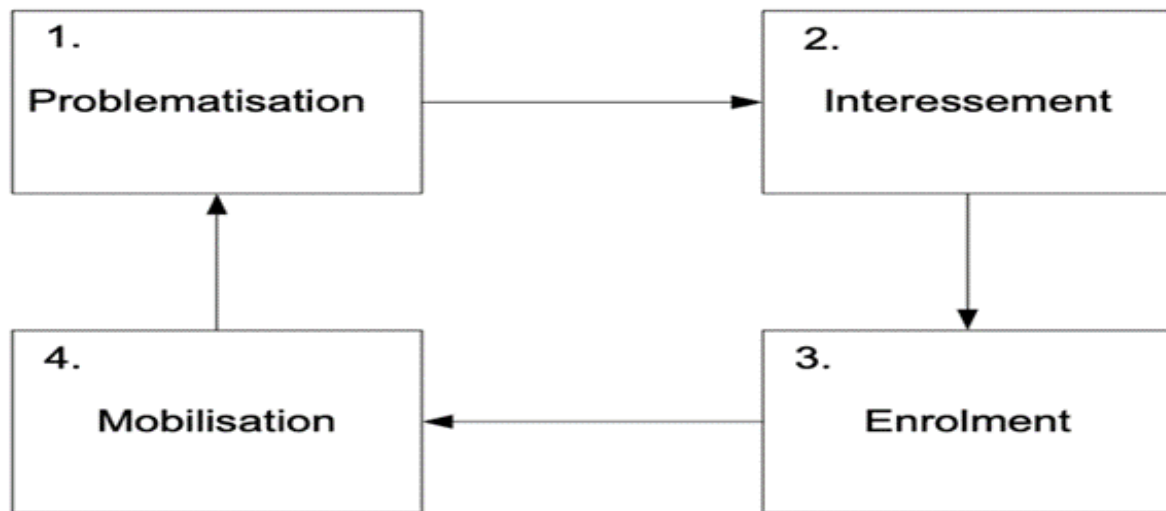


Figure 3.1: Moments of Translation (Callon, 1986).

3.2.1.1. Problematisation

In ANT, problems do not necessarily mean something that is broken. It is simply initiating an action that needs a different solution or method (Iyamu, 2018b). Problematisation, as depicted in Figure 3.1 above, is the first of the four moments during translation. At this stage, the leading actor formulates or articulates a problem (Callon, 1990) for the other actors in the network. The focal actor must seek buy-in for new construction or a new way of doing things (Mpazanje, 2009). In doing so, human actors are encouraged to participate and share their knowledge.

During the problematisation stage, the focal actor makes the plan impossible for other actors within the network to dismiss, and as a result, the actors respond by making efforts to align with the plan (Callon, 1990; Heeks & Stanforth, 2015). Such a convincing attempt by the focal actor is often embedded with power. The power composition within a network frequently impacts some actors' ability to resist the problematised issue, such as transitioning into agile business analysis (Williams-Jones & Graham, 2003).

3.2.1.2. Interessement

The interessement stage follows after problematisation. At this stage of translation, the actors are informed of the network plan, and tasks are allocated (Iyamu, 2021). The actors either positively acknowledge by accepting the plan (buy-in) and the functions or resist attempts to formulate a different strategy (Callon, 1990). Interessement transpires once other network actors affiliate their interests to the problematised events (Dwiartama & Rosin, 2014). At this stage, actors in the network accept the tasks that have been assigned to them by the focal actor (Callon, 1990). Thus, the interessement usually requires shifting negotiations (Iyamu, 2021) and compromise throughout the process to align with other actors' interests in the plan. Power is employed if and when this effort fails, applying an obligatory passage point (OPP) (Williams-Jones & Graham, 2003). The OPP is an approach that allows the focal actor to force others into taking on tasks that have been assigned to them. The same OPP approach can also be employed at the enrolment stage.

3.2.1.3. Enrolment

Enrolment is the third stage of translation. At this stage, actors accept responsibility in the interest of success (Callon, 1990). This is when the main actors call on other actors to accept responsibility, take action, and comply with the rules of the network (Sage et al., 2011). To ensure successful enrolment, the focal actor must capture the other actors within the network, although the actors must also agree to enrol. During enrolment, the main actor attempts to interrelate with the roles and arrangements of various actors. This study helps interpret the roles and concerns of each employee in transitioning to an agile business analysis approach (Shim & Shin, 2016).

3.2.1.4. Mobilisation

Mobilisation is the final stage of the translation process. At this stage, the focal actor or spokesperson ensures that actors perform their assigned duties to successfully attain the network's aims and objectives (Callon, 1990; Tatnall, 2010). Spokespersons promote and support the activity of a network, thereby providing network stability. The primary purpose of mobilisation is stabilising and maintaining an alliance within the network (Tatnall, 2005).

Mobilisation requires that the focal actor constantly persuade the network actors that their interests are still being sought after. With active support from actors, disagreement is no longer an issue in the mobilisation phase (Mähring et al., 2004). Actors in the network need continued convincing by the spokesperson to show them or demonstrate that their interests have not changed or been compromised. This negotiation is a continuous process (Makovhololo &

Iyamu, 2020). The designated person should communicate the interests and roles of the actors as the process evolves (Shim & Shin, 2016).

3.3. Positioning ANT in Information Systems

In information systems (IS), ANT is often viewed as a theoretical lens to analyse and obtain knowledge about human events (Adelakun & Iyamu, 2021; Walsham, 1995). The rapid increase in new IS development has made it hard to differentiate between IT systems and end-users (Lee, 1994). Also, the significance of the interaction between technology and human beings has been greatly emphasised in IS literature for several years, which is a concern within ANT (Akrich, 2023; Cordella & Shaikh, 2006; Latour, 1996) claim that the development of technologies is autonomous from a social perspective, although it directly impacts the human beings in the system. by contrast, (Blok et al., 2020) argued that autonomy of technology development is best handle as an accomplishment, that will probably depend on other components for supports.

ANT is increasingly employed in IS studies because it is suitable for underpinning social and technical phenomena. One of the reasons for that is that it deals with the interactions and connections between technology and human beings and pays attention to the underlying forces of these interactions and connections and not just the stability of these connections (Latour, 1987). Within IS, ANT is the concept that can understand the problematic societal interactions relating to implementing new information systems (Mähring et al., 2004). In addition, ANT has also been used to understand the political activities associated with deploying new IS-related artefacts in an organisation.

3.4. Conceptual Framework in Transitioning Agile Business Analysis

Increasingly, translation moments have been employed in IS research to extend its applications beyond technology adoption and design into broader areas (Walsham, 1995). This includes the transitional activities of IT, one of which this study focuses on – transitioning from traditional business analysis to agile business analysis. The researcher used the ANT model to underpin the study as presented (see Figure 3.1 above) (Callon, 1990) and discussed above; a conceptual framework is constructed, as shown in Figure 3.2 below. The conceptual framework can guide data analysis and interpretation. ANT enables examining actors' alignment into a network of social and technological arrangements (Gao, 2005). From an ANT perspective, the translation process provides a theoretical context for analysing and examining human activity. In ANT, translation is a process of reconstructing events using negotiation (Adelakun & Iyamu, 2021).

The Head of the IT unit (or division) is bestowed with power. As a result, it is difficult for employees to resist any issue, such as transitioning into an agile business analysis approach that they present as a problem that needs to be fixed. The power is based on the contractual arrangement between the employees and the organisation, represented by the Head of the IT unit. Thus, the business analyst and end-users might be unable to challenge the problematised item.

The framework has four stages, as in ANT's moments of translation. Some attributes that guide the analysis of the transitional process are found within the stages, from traditional business analysis to agile business analysis, as described in the study. The actors within a network negotiate shared interests, such as objectives and incentives, which are then transferred between the network actors (Callon, 1990). Hence, the way actors relate within the network is reconstructed. Centred in the framework is negotiation. As transitioning from traditional business analysis to agile business analysis moves forward, negotiation of viewpoints, interpretation of ideas and knowledge of subjects and objects continue to shift.

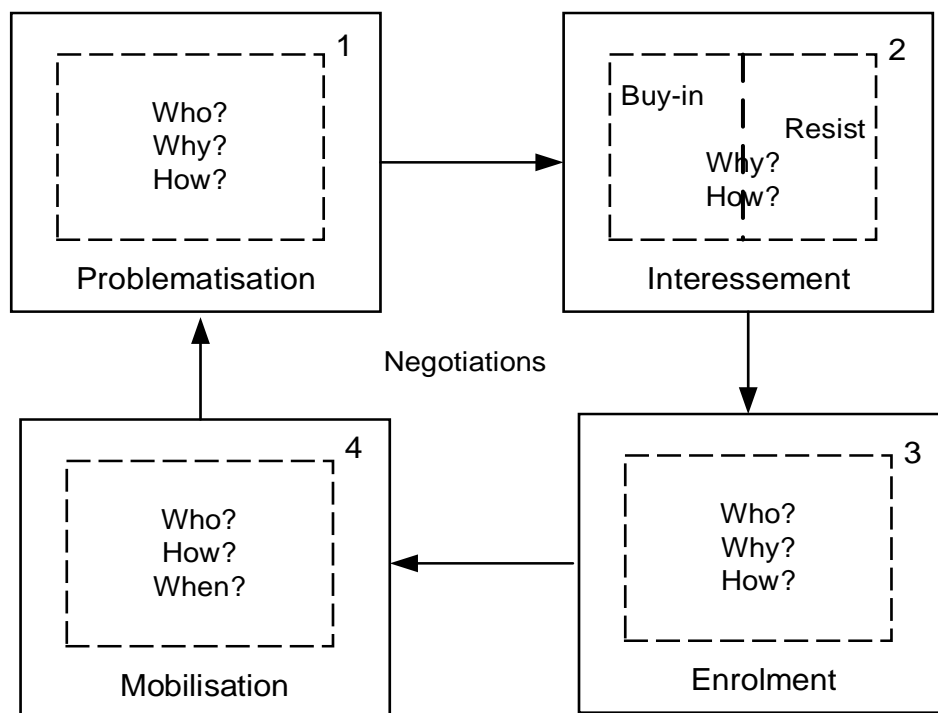


Figure 3.2: Conceptual Framework

Conceptual Framework: Stage #1

Transitioning from traditional business analysis to agile business analysis is a sociotechnical phenomenon whereby human actors employ non-human actors (processes, agile business analysis, and traditional business analysis). Thus, it is critical to understand who, why, and how the transitional process came to be in the organisations. Problematisation is entrenched

in direction, solution, interest, and contribution, which require acknowledgement (Callon, 1990). Problematisation is helpful to determine why the idea of transitioning from traditional business analysis to agile business analysis was problematised in the organisations used as cases in this research. Notably, the persons who problematised the idea were established. This helps readers better understand the power bestowed on the actors and how the power was exercised in problematising the concept in the organisations.

Conceptual Framework: Stage #2

Interessement is influenced by various factors such as social events, cultural affiliation, and systems know-how. Social networking is more than a technical challenge in transitioning to agile business analysis practices. Also, humans employ various factors to develop, deploy, and support IT solutions and activities within networks. Some of these factors make the composition of networks complex (Mkhomazi & Iyamu, 2013). Consequently, some employees, including members of a management buy-in and others resist the initiatives and solution developments.

Buy-in or resistance can be explained with the help of various meanings and understanding. These meanings may impact 'transitioning from traditional to agile business analysis' due to the nature of problems in organisations. Thus, it is essential to inquire why certain actors become interested in the proposed changes and others are not interested in the transitioning initiative in organisations. During translation, an actor network can expand or disintegrate due to the level of buy-in or resistance as the organisation moves into the next stage (Maurizio & Petroccia, 2023).

Conceptual Framework: Stage #3

From an analysis perspective, it is necessary to identify which actors enrolled, the rationale (why) the enrolment took place, and how the process progressed if it did so. During the process, if the main actors can convince all actors to support the planned change, then the actors are viewed as enrolled actors within the network. It is, therefore, critical to know who among the actors enrolled to determine what factors influenced the actors. That outcome shows that an agreement was reached and that there was support from the actors. This also suggested that the main actors had successfully persuaded the other actors to support the planned changes.

An organisation that embarks on transitioning to agile business analysis would be interested in how employee enrolment takes place. When an organisation transitions from traditional business analysis to agile business analysis, enrolment influences the translation of

relationships. It can determine the initiative's success as the main actors exercise power. Translation by human actors can lead to changes in the meaning of entities and processes, including relationships (Li et al., 2021).

Conceptual Framework: Stage #4

Conceptually, at the fourth stage, focal actors or representatives mobilise their colleagues to support the ongoing initiative in the organisation. Who the representative is and their role is critical. Also, how the mobilisation tasks are conducted contributes significantly to the success or failure of the initiative. The 'how' includes the medium of expression and communication between the representative and the involved employees (Shim & Shin, 2016). Another vital aspect is at what stage in the process (or project) the designated person begins to mobilise the other actors. Latour (1996) stated that organisations strive for stability when transitioning into new ways of working or implementing new IT systems.

The mobilisation of actors depends on the relationship that exists between them. Therefore, it is crucial to establish this relationship as this research examines the challenges faced by networks in transitioning from traditional business analysis to agile business analysis. During the formation of relationships in actor network resistance, disagreements may occur, which could impede the stability of the network (Williams-Jones & Graham, 2003). Some actors within the actor network may try to form a new network and assemble other actors to attain their objective (Callon, 1990), meaning they find alternative solutions rather than transitioning into the agile approach.

3.5. Summary

ANT was selected to underpin this research for reasons explained in the chapter. Based on ANT's moments of translation, a conceptual framework was developed. The conceptual framework was comprehensively discussed to clarify how it could be applied to the research. The conceptual framework guides the data analysis and interpretation in the study. The next chapter examines the research methodology that was used in the research.

CHAPTER FOUR

Research Methodology and Design

4.1. Introduction

This chapter discusses the methodology that was applied in the research. The research methodology includes the research methods, design, the data collection approach, and the technique used to analyse the data. The methodology was selected based on the research objectives, which focus on transitioning from traditional business analysis to agile business analysis in organisations. The chapter is divided into eight main sections. The first section introduces the chapter. The research methods, comprising qualitative, quantitative, and mixed methods, are covered in the second section. In the third section, the research approach is covered. The research strategy is discussed in the fourth section. The fifth and sixth sections discuss the data collection and analysis, respectively. The ethics that guided the research are discussed in the seventh section, and a chapter summary is provided.

4.2. Research Philosophy

Research approaches could be categorised as either positivist or interpretivist. The interpretivist approach was employed for this study from a qualitative methods perspective. The core idea of interpretivism is to understand the subjective meaning of persons. Increasingly (Goldkuhl, 2012). IS researchers employ an interpretive approach and qualitative methods in their studies (Stokes & Urquhart, 2013). The interpretivist approach involves interactions with the data and subjectively ascribing meaning to it to gain in-depth knowledge and a deeper understanding of the phenomena within their natural setting (Bygstad & Munkvold, 2011).

ANT was used to underpin the study. It was almost impossible to underpin the study with ANT without adopting the interpretivist subjective approach. This research adopted an interpretivist stance, using ANT as a theoretical lens to understand better the challenges faced when transitioning from traditional business analysis to agile business analysis practices in South African banking. This study employed an interpretive stance to appreciate and make sense of several activities, processes, roles, and contributions of actors in the transition from traditional business analysis to agile business analysis.

4.3. Research Strategy

A research strategy is determined by how a researcher plans to answer the research question and achieve the research objectives (Saunders et al., 2012). The case study approach was

employed as the research strategy in this study. The approach is usually associated with qualitative methods. The case study approach is most suitable for qualitative empirical research because it allows interactivity, leading to a deeper understanding of complex situations. (Wohlin & Aurum, 2015). Also, a case study is appropriate because the researcher seeks answers to questions such as why and how (Yin, 2011). The case study approach is broadly used in IS research (Benbasat et al., 1987). Perhaps the approach is primarily aimed at documenting empirical evidence from the perspectives of the real-life social world (Yin, 2003). Aligned with ANT, the case study approach reveals intricate and ubiquitous collaborations between people and technologies within an organisation (Dubé & Paré, 2003). Thus, the approach suits the study because it focuses on people, technology, and processes.

Two South African banks were selected as cases for the study. These banks were selected based on the following criteria: (1) at the time of this study, the bank has or was in the process of transitioning from traditional business analysis to agile business analysis; (2) the bank voluntarily granted access to the researcher to perform the case study research there; and (3) the banks were conveniently situated for the research; (4) The two cases were selected because they offer similar products and services (5) The two cases compete for the same clients and market share (6) The two cases are governed by same rules and regulations.

The identities of the banks remain undisclosed to conform with ethics requirements. The pseudonyms were NorthEast Bank (NEB) and SouthWest Bank (SWB). The first case (NEB) lasted for about 2 months and 2 weeks, and the second case (SWB) lasted for about a month.

In this case study, ten NEB employees participated, as presented in Table 4.1 below. They comprise four business analysis specialists, one senior business analysis manager, three POs and two SMs. Table 4.1 below lists each participant's role, assigned participant pseudonym, and length of time at NEB. (*NEB_P8*).

Table 4.1: NEB Participants

Role	Pseudonym	Year of Service
Business Analyst Specialist	NEB_P1	7 years
	NEB_P2	8 years 3 Months
Business Analysts	NEB_P3	3 years
	NEB_P4	5 years
	NEB_P5	5 years 4 Months
Product Owner	NEB_P6	6 years
	NEB_P7	4 years 2 Months

Senior Business Analyst Manager	NEB_P8	11 years 2 Months
Scrum Masters	NEB_P9	4 years
	NEB_P10	3 years 6 Months

As discussed in the previous chapter, section 4.5, a set of criteria was used to select the participants. This includes at least 18 months in the organisation, knowledge of business analysis, and product ownership. These were to ensure that the participant knew the reason for transitioning from a traditional approach to agile practices in the organisation's context. This included understanding the influencing factors and their complexity.

Five SWB employees participated in the study based on the criteria and saturation point. Table 4.2 below shows one solution strategist, a business analyst, a system analyst and two business solution managers. As explained in the previous chapter, the point of saturation is when no new information is forthcoming. Table 4.2 below lists each participant's role and assigned participant pseudonym and indicates the years of service time in SWB.

The approach employed in selecting participants was the same as in the other case study (NEB), discussed in section 4.5, Chapter Four. A set of criteria was used to select the participants. This includes at least 18 months in the organisation, knowledge of business analysis, and product ownership. These requirements ensured that the participant knew the reason for transitioning from the traditional approach to agile practices in the organisation's context. This included an understanding of the influencing factors and the complexity of the study. Based on the objectives of the study three participants in case two assisted the study to achieve its objectives.

Table 4.2: SWB Participants

Role	Pseudonym	Year of Service
Solution Strategist	SWB_P1	7 years 3 Months
Business Solution Manager	SWB_P2	8 years 2 Months
	SWB_P3	7 years

4.4. Data Collection

Sources of data and how they contributed to the research findings are significant as they determine the credibility and rationality of the research findings (Benbasat et al., 1987; Yin, 2011). In line with the purpose of this study, meaning the social processes relating to the transition from traditional business analysis to agile business analysis practices, qualitative data collection methods were used.

Qualitative research adopts various techniques, including observation (Iyamu, 2018a), interviews, and document analysis (Saunders et al., 2019). Also, various interview techniques are used: structured, semi-structured, and unstructured (Harrison et al., 2017). Because of the qualitative nature of the study, document analysis and a semi-structured interview technique were selected. Semi-structured interviews allow for more flexibility, which enables new questions to emerge during the interview process (Rudolph, 2015). Semi-structured interviews allow participants to express themselves and their views (Babbie, 2020).

Case study protocols should be developed for multiple case studies, as the protocols benefit the researchers. Appendix C shows that study protocols improve the reliability of the case study by guiding the research data collection (Yin, 2009).

Data was collected from BAs, senior business analyst managers, system analysts, product owners, scrum masters, solution strategists, and business solution managers. Defined appropriate criteria were employed when selecting the participants. A total of fifteen people from the two organisations participated in the study. Table 4.3 below shows the demographic details of the participants. The semi-structured interview allowed the researcher to ask additional follow-up questions or request clarification to responses during the interview process. The interviews were primarily conducted one-on-one, in-person (physical presence). Six interviews were conducted virtually, and a virtual approach was used as an in-person interview was impossible. The interviews lasted an average of 35 minutes.

Appendix D depicts the interview questions presented to each participant in the study. In each interview session, opening questions were asked where the participants requested to introduce themselves, followed by the main study questions relating to the challenges, benefits, and influencing factors when transitioning from traditional business analysis to agile business analysis and closing questions where participants were asked for additional comments and recommendations.

The interviewees were given codenames. This was done to ensure the anonymity of the participants and to respect the interviewees' right to privacy due to the sensitive nature of the environment. The respective codenames are highlighted in Table 4.3 below.

Table 4.3: Participants

Participant	NorthEast Bank	SouthWest Bank	Total
NEB_BA	4		4
NEB_PO	3		3
SWB_SS		1	1

NEB_SM		2	2
SWB_SB	1		1
NEB_SM	2		2
Total	10	3	13

The interviewees were electronically recorded. In addition to electronic records, the researcher produced hand-written notes. This was to ensure that the key points made by the interviewees were not lost. Before analysis of the collected data, the electronically recorded interview data was transcribed into a complete written text. This was done immediately after the interviews were completed to avoid any loss of key points raised in the interviews.

The process involved triangulation, which assisted in ensuring the credibility of the study. Documents related to the study were collected. Permission was granted to access some documents, as shown in Table 4.3 below. This includes institutional (banks) strategic documents, traditional analysis (waterfall), an agile end-user manual, and technical support strategic and operational documents. The documents are assigned codes, as shown in Table 4.4 below.

Table 4.4: Documents List

Documents	NorthEast Bank	SouthWest Bank	Total
NEB_D1	1		1
NEB_D1	1	1	2
NEB_ACG	1		1
SWB_D1	1		1
SWB_D1	1	1	2
Total	5	2	7

4.4.1. Unit of Analysis

In case study research, the unit of analysis is a phenomenon which is being studied (Miles & Huberman, 1984). The unit of analysis can also be described as the case itself (De Massis & Kotlar, 2014). The unit of analysis can be referred to as the topic that the researcher will write the final report on at the end of the study (Osman & Tanner, 2017). This means that the unit of analysis is the transitioning journey, as the researcher will report on how the organisations transition from traditional business analysis approach to an agile business analysis approach.

4.5. Data Analysis

In this section, the data analysis of NEB and SWB is presented. The data analysis was conducted following the subjective reasoning stance from the interpretive approach perspective. ANT was employed as a lens to guide the analysis. The data collected from both cases were combined for analysis purposes. The analysis focuses on achieving the aim of the study, which was to understand and explain the challenges organisations face when transitioning from traditional business analysis to agile business analysis practice in South Africa. This involves gaining a better insight into the communication and relationship between humans and non-human actors, how heterogeneous networks were consciously or unconsciously formed, and how activities were negotiated between actors towards transitioning from traditional business analysis to agile business analysis practice.

Thus, using ANT, the data analysis began with establishing the main actors in the organisations. After that, the networks of actors were examined to gain a deeper understanding of the trajectory of the interactions and formation of networks that led to roles and responsibilities—the four translation moments concluded the analysis (Callon, 1990). This meant that the four stages were examined to understand better organisations transitioning from traditional business analysis to agile business analysis practice. This included showing how negotiations between network actors manifested to influence transitioning from traditional business analysis to agile business analysis practice. Shifting negotiation is argued to be one of the strengths of ANT (Callon, 1984; Heeks & Stanforth, 2015).

Table 5.1: Study Participants Interview appointments Schedule - NEB

Interview Date	Organisation	Designated Position
20/04/2023	NEB	Business Analyst Specialist
2/05/2023	NEB	Scrum Master
11/05/2023	NEB	Product Owner
16/05/2023	NEB	Business Analysts
26/05/2023	NEB	Business Analyst Specialist
01/06/2023	NEB	Senior Business Analyst Manager
07/06/2023	NEB	Product Owner
14/06/2023	NEB	Business Analysts
21/06/2023	NEB	Scrum Master
02/07/2023	NEB	Business Analysts

Table 5.2: Study Participants Interview appointments Schedule - SWB

Interview Date	Organisation	Designated Position
19/06/2023	SWB	Business Solution Manager
24/07/2023	SWB	Solution Strategist
30/06/2023	SWB	Business Solution Manager

4.5.1. Tracing Focal Actors

In ANT, the focal actors cannot be known in advance (Williams-Jones & Graham, 2003). During the tracing of the focal actors the researcher starts by identifying the main motivators for the transitioning from traditional business analysis to agile business analysis by identifying the actions and the leadership roles played by these individuals. The Impact outcome can be used to trace associations and networks that are formed around this change of processes (Heeks & Stanforth, 2015). Hence, the researcher looked at the degree of impact that the transitioning to agile business analysis will have on individuals in certain roles of responsibilities within the organisations.

4.6. Confidentiality and Ethics

The University of Cape Town (UCT) considers research ethics extremely important. Per the Ethics Committee application form (see Appendix A), researchers must take every measure to ensure that all data collected was for research purposes and must not be used for any purpose other than for that particular study. The individual participants and participating organisations must remain completely anonymous. Therefore, the UCT ethics form was submitted to the Ethics Committee for approval. The researcher is obligated to obey the institution's research requirements. The interview agenda was communicated to all participants, who were also requested to sign the UCT interview consent form (see Appendix B).

Anonymity concerning organisational issues was diligently maintained. All data collected from the participating organisations were presented in a manner that ensured that the anonymity and confidentiality of the gathered data were strictly kept. The participants were informed that they were not obliged to participate in the research and that their identities would not be disclosed.

4.7. Summary

The researcher is very aware that the successful conclusion of this study about the transition from traditional to agile business analysis is essential. Furthermore, the researcher intended

to produce an exciting and valuable report by carefully adhering to the standards presented in this chapter.

CHAPTER FIVE

Case Study Description

5.1. Introduction

This chapter provides detailed information about the organisations (banks) that participated in the study. As presented in previous Chapters, two organisations (banks) were selected to participate in the study. The organisations were assigned pseudonyms NEB and SWB, to avoid disclosure of their identities.

This chapter is divided into nine main sections. The chapter is introduced in the first section, followed by an overview of the cases (organisations) used in the study. The third and fourth sections focus on the two cases (NEB and SWB) used in the study. The sections provide details about the organisations. The details are presented without disclosing the identities of the organisations. The fifth and sixth sections cover functional areas and projects and first agile project at NEB, respectively. The seventh section provides details about first agile project that were not identified at SWB. In the eighth section, the role of IT in both organisations is presented. In the ninth sections the chapter concludes with a summary.

5.2. Overview of the Cases

This section describes the aspects that are similar in both cases. Both are financial organisations (Banking) in South Africa. The organisations are among the largest in the country. The two organisations, NEB and SWB, have a combined employee complement of about 80,000 members. The organisations have branches in all provinces in the country. They provide the same types of services using similar technology and approaches.

The two organisations had recently embarked on a journey to transition into agile business analysis, moving away from traditional business analysis practices. The transitioning agenda is being carried out across the organisations, with several departments and teams involved, which range from operational activities (business-as-usual) to key business initiatives and projects.

NEB indicated that their transitioning from a traditional business analysis approach to an agile business analysis approach started in 2016, the actual transitioned end date cannot be determined as quoted by a participant.

So, I was involved in one of the first teams that made transition to agile within the bank ecosystem, in the transitioning process there wasn't much knowledge, there wasn't CoE.

And seven years on still transitioning, still learning and while agile business analysis is running there is a lot of components of agile that the teams are not doing like a good agile team, e.g. full stack that can develop across the stack from database to UI to middleware etc.

(NEB_P5).

While SWB the organisation commenced the transitioning from a traditional business analysis approach to an agile business analysis approach in 2018, officially it can be stated that the transitioning process ended in 2022 as quoted by a participant.

From IT perspective, it can state that the transition to agile business analysis within the organisation ended in 2022, as we have teams that practice agile and do things in an agile way of work.

(SWB_P2).

Traditional and agile business analysis methodologies were used to deliver key initiatives and IT projects successfully. These initiatives and IT projects range from product analysis to financial product design, software development, existing system enhancements, and new bespoke information system applications. Agile business analysis practices have been adopted (or are in the process of being adopted) throughout the two organisations. The organisations cite the reasons for moving from a traditional business analysis approach to a modern one.

From my perspective, things work much faster than what they used to be in the waterfall world, and things that add value are deliver to the client much quicker than what we used to

(NEB_P8).

The following two sections provide descriptions of the two organisations selected for this case study. Each organisation is described in terms of its business operations, products and services, global presence, service outlets, and location.

5.3. NorthEast Bank: Business Operations

NEB is ranked among the largest banking organisations in South Africa. It is listed on the Johannesburg Stock Exchange (JSE). In addition, it is listed on the Stock Exchanges of other African countries, such as the Namibian Stock Exchange (NSX). The organisation was founded over two centuries ago and operates nationally and internationally. Like many financial institutions in South Africa, NEB's head office is based in Johannesburg and has offices in every province.

NEB generates revenue from private equity, credit card issuing and processing services, custodial services, unit trust administration and asset management services. These services and operations require regular analysis to ensure the accuracy of information, better decision-making, and improved services. Thus, the type of analysis employed is critical.

NEB has over 32,000 permanent employees and over 600 outlets across South Africa. At the time of this study, the organisation has over 6 million customers across all income levels. Of the customers, 2.6 million are digitally active. The study focused on the head office as it has employees responsible for providing technological solutions to support the organisation's business operations.

NEB provides services to its customers through five main business clusters: Corporate and Investment, Retail and Business Banking, and Wealth (the cluster in Private Wealth resides). The participants in this case study are employees in the technology unit at the head office, often referred to as group technology (GT). The unit (GT) is primarily responsible for delivering a range of technologies to support the organisation's business operations in providing services to its customers.

NEB assigned many of its employees to various technology-related initiatives and project teams, which included BAs, developers, product owners, scrum masters, system analysts, enterprise architects, business specialists, testers, delivery managers, etc.

5.4. SouthWest Bank: Business Operations

The SWB is ranked as one of South Africa's largest banking institutions (organisations). The ranking is based on market and asset capitalisations. Like NEB, SWB is listed on the JSE and is exchanged in other African countries. The head office of the organisation is in Johannesburg, and it has branches or outlets in all provinces of the country.

Primarily, the services offered by SWB comprise corporate and retailing types of banking, which include financing of property and foreign exchange transactions. Also, SWB focuses on private equity, providing credit facilities, and other finance administrative and processing services, and asset management services. Currently, SWB has over 48,000 permanent employees and over 600 network branches across South Africa. This case study focused on the head office primarily because it hosts the employees responsible for providing technological solutions to support the organisation's business operations. Thus, participants in this study are employees in the GT cluster. The cluster delivers technologies to help its business operations and customers.

At the time of this study, the SWB strategy assigns technical employees to a technology-related projects team. This includes projects such as solution strategists, BAs, system analysts, product designers, project managers, and enterprise architects.

5.5. Functional Areas and Projects

As stated previously, the data for this study was collected from various project teams within the participating organisations, NEB and SWB, particularly IT-related project teams. These projects span from developing new bespoke IT systems to enhancing existing ones to designing, developing and implementing new product offerings.

The NEB and SWB businesses' operations are divided into different functional areas called clusters. Functional areas (Clusters) are departments which execute business functions/projects. The primary objectives of the clusters are to ensure that all-important business operations are conducted efficiently and organisations need to achieve their primary goals. The criticality of these operations makes business analysis essential. Furthermore, specific functional areas are tasked with the primary responsibilities of supporting particular business objectives. Each functional area within NEB and SWB has a functional head/or executive whose primary responsibility is to identify and prioritise tasks and activities that support and enable the goals and objectives of the organisations. Among the functional areas within NEB and SWB are GT, Business Process Management, and Customer Relationship Management. The functional areas are briefly discussed as follows:

Group Technology (GT): The main objective of GT is to improve and deliver key technology and systems enhancements that contribute to organisations' performance. This is to provide frontline employees and clients with updated technologies and enhanced services. The head of GT was referred to as the Chief Information Officer (CIO) at the time of this study. Within the CIO's office are various assets and technology owners. This is the functional area where the transition to agile business analysis was planned and managed.

Business Process Management (BPM): The importance of BPM within NEB and SWB involves providing organisations with the flexibility to meet the ever-changing external demands. In addition, BPM as a Business process tool addresses the velocity of organisational responsiveness to customers' needs. This is why the BPM cluster continuously designs and re-engineers business processes to reduce costs, increase the pace at which the organisation responds to changing market conditions, ensure product reliability, and improve service delivery. The BPM cluster also addresses the product quality and services regarding their stability and capability within the NEB and SWB businesses; processes form parts of the

theories of total quality management (TQM). The transition to agile business analysis happens within the BPM cluster.

Customer Relationship Management (CRM): CRM units within NEB and SWB, at the time of this study, were responsible for developing services for effectiveness and efficiency. This includes short-term and long-term relationships with customers. The CRM unit is a part of an organisation's business ideas. The unit is also responsible for making it easy for customers to conduct business with organisations. The CRM unit's main objective is to maintain customer loyalty by offering tailored services to its customers.

5.6. First Agile Project at NEB

A software upgrade project in the NEB was the first to utilise the agile business analysis approach. The decision to adopt the agile approach was because the banking platform's front end was experiencing challenges. The initial attempt to resolve the obstacles was a hybrid agile approach. This project involved upgrading the account opening functionality on the banking platform system, which the branch consultants mainly used. The outcome was chaotic, mostly because the project team had no clearly defined roles and responsibilities. Also, there was no agile coach to guide and monitor the team. In addition, the project team experienced complex software challenges, forcing the project to be declared a failure.

As part of its role, when there are technology challenges with the banking system, the GT senior management convenes a meeting with the project team to look for a possible solution. This includes finding ways to improve business analysis and software development in addressing organisational challenges regarding quality, predictability, and productivity. In response to the problematised challenges, some actors of the analysis team attempted to develop their approach.

5.7. First Agile Project Were Not Identified at SWB

The first project where the agile methodology was utilised within SWB could not be identified. This was because of the many projects that were ongoing at the same time during the initial attempt to adopt an agile business analysis approach. Also, SWB did not deliberately select a project to be used as their first attempt to test the agile business analysis approach.

The institutions were selected because they had transitioned from traditional business analysis to agile business analysis, which is the focus of this study. Although, at the time of this study, the organisations were deeply grounded and had invested hugely in traditional

business analysis practices, they nevertheless showed the attributes of organisations in transit from traditional business analysis practices to an agile business analysis method.

5.8. NEB and SWB: The Role of IT

Both organisations, NEB and SWB, view IT as a business enabler that can rapidly respond to customer demands and market changes. Hence, there is a massive investment in IT from both organisations. A considerable portion of these investments goes towards new IT systems (software) development, system enhancements, software upgrades, data management, and upskilling of employees, which allows employees to improve their skills for transitioning from a traditional approach to agile practices. The NEB and SWB also regularly invest in up-to-date hardware such as servers, laptops, printers, and connectivity. All these investments ensure quick response time and efficient and effective service delivery to its customers.

Before transitioning to agile business analysis, the quality and accuracy of the business requirements elicited, analysed, and documented were sometimes concerning or challenging in NEB. On the contrary, the quality of the IT systems that were designed and implemented, including the system enhancements that were conducted and the predictability of NEB's business activities, were challenging to SWB. Thus, some IT systems often contain systems errors, and the main functionality delivered was not what was envisioned and required by the bank's business stakeholders in both NEB and SWB. In this context, predictability can imply some level of trust by business stakeholders that the implemented IT systems delivers envisioned business benefits.

As a result of these challenges, a system workaround was required to ensure that the organisations continued to service their customers. Also, both organisations often exceeded the estimated delivery time and budget. In this context, the workaround is how an organisation escapes IT system challenges when the required functionality has not been delivered. In both cases, according to its mandate, GT was not providing the necessary support to the business stakeholders; therefore, it was viewed as unpredictable and unreliable. Questions about GT's productivity and values were then raised. These challenges triggered an enquiry into a new approach towards business analysis and systems development within the GT functional area.

Before transitioning to agile business analysis, NEB's GT cluster had over six thousand team employees. These employees were situated in different locations within the organisation. The locations of the teams were allocated according to their roles and responsibilities. For example, the BAs were located within business units or departments where they provided service. The same went for others, such as the system developers and project managers.

The teams were in separate locations. Systems developer teams had specific skills specialisation with no room to multi-skill. The BAs also had specific skills specialisation, which meant they were hardly multi-skilled. Consequently, interaction and collaboration between these groups of experts were challenging. The members of the team assembled during the weekly meetings. The meetings were compulsory because it was when project status was discussed. The team was not precisely functioning as a team but as individuals assembled according to their expertise.

when designing a solution from system perspective some time there is no IT involvement in all that which I would like it to happen, because we were to involve IT right from the beginning, we will basically be having three-way conversations, the project team, business, and IT team, we can basically iteratively discuss ideas from a technology perspective which is IT responsible (SWB_P1).

In both cases (NEB and SWB), GT did not frequently deliver the required business benefits even though they understood the critical roles that IT played within the organisations, as indicated in the above quote. The challenges experienced triggered the requirements for an improved quality and reliable business analysis approach. Agile business analysis was uncovered by the GT team, which was then communicated to the entire GT cluster, top management, and business stakeholders. That was how transitioning to agile business analysis was problematised in the organisations.

5.9. Summary

This chapter comprehensively viewed both business operation, industry, and size cases. In addition, the chapter also presented the key actors in their networks within the organisations. This helped to understand actor networks and how they collaborate and interact towards transitioning from a traditional approach to agile practices in their respective organisations. The role of IT within the two participating organisations was also presented. The cluster functional area of the participating organisations was also highlighted.

The next chapter focuses on the data analysis of the case study, using a theory that underpins the study, which is the ANT.

CHAPTER SIX

Analysis and Findings

6.1. Introduction

Based on the study's objectives presented in Chapter One, data was collected from two organisations, NEB and SWB. The four moments of translation of ANT were followed in the data analysis. The four translation moments are problematisation, interessement, enrolment and mobilisation, as comprehensively discussed in Chapter Three. This chapter presents the study of the data. This chapter is divided into five main sections. The first section introduces the chapter. The second and third sections present the data analysis. The results obtained from the data analysis are discussed in the fourth section. Finally, a summary of the chapter is given.

6.2. Actors

In ANT, actor looks at various strategy of identifying groups, because actors themselves identify groups in a multiple way (Iyamu, 2018b). There are two types of actors in NEB and SWB. These are humans and non-humans (such as software and processes). From an ANT perspective, they are actors because they can make a difference within an environment. In the context of the organisations (NEB and SWB), the actors are influential and fundamentally interconnected within their respective organisations. As shown in Figure 6.1 below, the human actors include the scrum masters, BAs, software developers, and business managers. This means that the human actors are spread between each organisation's technical (IT) and non-technical (business) units.

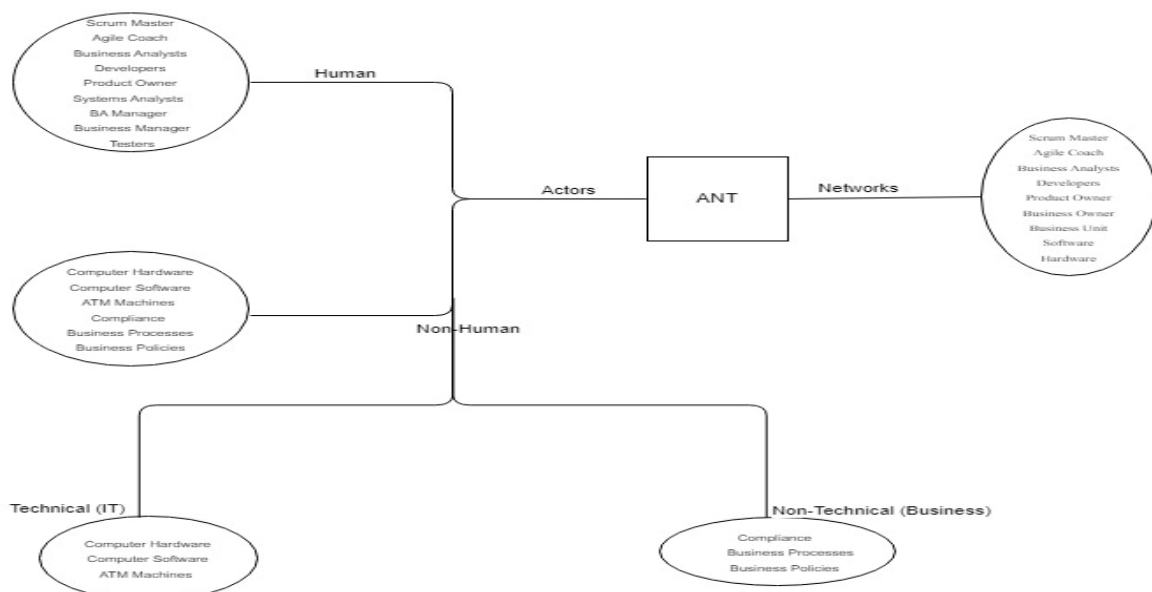


Figure 6.1: Actors and Networks of NEB and SWB

As shown in Figure 6.1 above, the other human and non-human actors within NEB and SWB are identified. The organisations comprise many staff members, divided into two primary teams: frontline and support staff. The teams of support staff include BAs, developers, scrum masters, product owners, business analyst managers, business solution managers, solution strategists, systems testers, systems analyst architects, etc. The other team of frontline staff comprises sales staff, branch consultants and branch administrators.

The human actors are assigned different roles and responsibilities within the organisations. For example, the support staff are responsible for eliciting business requirements and analysing and recommending suitable business solutions on behalf of the organisations. The responsibility includes investigating and implementing solutions that support the organisation's business operations. At the same time, the frontline staff ensures that the business operations are conducted efficiently using different business systems and processes. As banking organisations, NEB and SWB serve the needs of their clients, making them essential stakeholders. Human and non-human actors play important roles in how business analysis is conducted, requirements are analysed, tools are utilised, and processes are managed. There are two primary significant aspects of the roles of actors. Firstly, human actors employ non-human actors to execute tasks. Both human and non-human actors collectively work together to achieve a common goal (Heeks & Stanforth, 2015). The other significant aspect is that, by implication, both human and non-human actors contribute equally to the transition from traditional business analysis to agile business analysis practice. ANT observes the different motivations and reproductive behaviour of actors within a specific requirement and, therefore, it is different from other sociotechnical theories (Gao, 2005).

It has been argued that the lack of strong differentiation between human and non-human network actors doesn't consider the intentionality of human (Walsham, 1997) and instead focus is only placed on strengthen and expansion of the actors the network in question, Thus, (Iyamu, 2021) argued that human and non-human actors are interdependent for a common goal or interest to provide a desired solution to a problematised issue.

For analysis purposes, the non-human actors were grouped into three groups: Business Processes (including requirements elicitation and analysis), IS/IT (such software and computer) and business policies. Non-human actors within NEB and SWB include actors such as documentation. This consists of items such as business requirements specification (BRS) documents. The BRS documents business requirements and business processes within the organisations. One of the participants briefly stated the situation as follows:

BRS document contains detailed business requirements that is fully comprehensive that describes everything, such as business rules, flows diagram, use case scenarios, etc. The developer take document and then go and produce code out of it that was the norm at that time (NEB_P9).

Business analysis in the context of NEB and SWB comes in the form of projects, such as elicitation, analysis, and documentation of business requirements. Business requirements are elicited from business end-users within the organisation performing business operations, such as using banking platforms to assist external or internal clients in conducting their banking activities. BAs are responsible for executing business analysis and documenting detailed business requirements, while the business owner and systems end-users provide the business requirements. The developers write computer programmes for business requirements, which the external and internal stakeholders use to conduct banking activities such as credit applications. A business analyst within the NEB described the process as follows:

Agile gives you the power to break down things into understandable and consumable requirements so we don't have to wait for forever (NEB_P1).

Some technological artefacts involved in business analysis include computers and software. NEB and SWB staff are equipped with computers, including those used by management, branch consultants, and IT staff. These computers are functional with up-to-date software depending on the functions performed. The software is used for various purposes, such as the basic functionalities of a computer and enabling the users to communicate and store the information being generated within the organisation through multiple sources. A business analyst within NEB identified one of the software used as follows:

There is a certain software used to store all organisational documents; there is not just one software, but there is one used across the organisation that stores all documents called Enterprise Content Management (ECM) (NEB_P10).

It is evident, then, that actors, whether human or non-human, play an essential role in business analysis processes within the NEB and SWB. As illustrated in Figure 6.1 above, neither actors nor networks can exist independently. The relationship happens in a recursive process enacted by interactions, whereby the network becomes stable (Callon, 1984; Heeks & Stanforth, 2015).

6.3. Networks

In ANT, a network is a group of actors with a common interest (Callon, 1984). An actor may belong to more than one network, which makes it heterogeneous (Borgatti & Halgin, 2011). In an organisation, networks are project teams, business units, departments, or divisions. Also, networks are formed consciously or unconsciously. The implication of this is that it makes it feasible to classify the different roles that the network play, and in turn the influences and elements that control their character (Bielenia-Grajewska, 2020).

At NEB and SWB, fourteen actor networks were identified, as shown in Table 6.1 below. In some instances, the networks were black-boxed for clarity. This is because individual networks such as BAs who perform similar tasks are likely to share similar opinions.

Table 6.1: Identified Network Actors

Actors Network	Role
Business analysts (boxed)	Elicit business requirements, analyse the business requirements, map business processes, and produce business requirement specifications.
Systems developers (boxed)	Code the required functionality and produce working software.
Product owner (boxed)	Define and communicate the project version. Provide requirements.
Testers (boxed)	These test the pieces of software developed and ensure that software is according to the business requirements and is free from errors and bugs.
Traditional business analysis	The traditional business analysis method is practised, which means processes are being phased out in NEB and SWB.
Agile business analysis	The new business analysis methodology was adopted.
Senior business analyst's manager (black box)	Manages BAs and recommends training and mentoring BAs.
Scrum masters	Facilitate communication and collaboration between leadership and the agile team members to ensure a successful outcome.
Business stakeholder (boxed)	These group were classified as 'end-users', they include business managers. They utilise the systems to provide services to the clients.
Agile coach (boxed)	This is the external resource that is used to guide the transitioning processes.

Actors Network	Role
Project manager	Manages the project.
Solution strategist (boxed)	The individual or team identifies challenges or opportunities and proposes creative solutions to improve business objectives.
Systems analyst (boxed)	They study the organisation's computer systems and procedures and design improvements to help it operate efficiently.
Business solution manager (boxed)	They oversee and manage organisation IT operations, thus ensuring that they run efficiently.

Other groups (networks) of people are the internal and external stakeholders. The external stakeholders are clients who use the banking products and services. These stakeholders are segmented into groups such as retail and corporate, which are based on the bank's products. The retail clients (group) are individuals who bank in their capacity and are middle-income earners. While the corporate clients are individuals who bank in their capacity and are high-income earners.

Due to the increasing reliance on IT solutions, there is a designated IT department in the NEB and the SWB, as in many other organisations. In each organisation, within the NEB and SWB, consultants and sales personnel comprise different networks. The groups include the branch consultants and credit or loan application capturers. This personnel group share a common objective: to assist clients with their banking queries.

The support and frontline staff communicate within the organisations using various channels. Through the channels, each group contributes to business analysis and organisation processes. The NEB and SWB business analysis is conducted for multiple purposes, but the objective is to provide suitable business solutions to enable effective and efficient business operations. Business analysis requirements go through various reviews and signoff stages until they reach a point of acceptance and dissemination within the organisation. The stages are examined using the four translation moments in the next section.

6.4. The First Attempt of Problematisation

From an ANT perspective, problematisation is a process wherein a focal actor defines a problem in a manner that enables other actors to recognise it (Callon, 1984), and it can happen in more than one attempt and at various levels (Sarker et al., 2006). In transitioning from traditional business analysis to agile business analysis practice, two central attempts are made

in the NEB and SWB. At the SWB, the agile business analysis method was first introduced in 2020, whereby most of the impacted employees were encouraged to attend agile training to understand the methodology. The NEB agile business analysis approach was introduced in 2019 as their Business Analysis Centre of Excellence (CoE). The CoE falls under the technology group. As a first attempt at problematisation, the technology owners were identified as the main focal actors who attempted to impose their identity on the business analysis team, challenging them to begin to think of more effective and efficient ways of conducting business analysis that would deal with the critical challenges around productivity, predictability, and quality, to improve organisational performance. Table 6.2 below highlights the significant challenges that emerged from the first attempt at problematisation.

Table 6.2: Major Challenges Emerging from the First Attempt of Problematisation

Challenges Identified in the First Attempt	Quoted by NEB Participants	Quoted by SWB Participants	References
Promotion of individual analysis approach	7		7
Lack of understanding of lean requirements documentation	4	1	5
Resistance to change	11	3	14
Lack of Mindset Change	9	2	11
People complexity	7		7

6.4.1. Promotion of Individual Business Analysis Approach

In response to the focal actor’s problem of transitioning, the business analysis team tried to advance their business analysis approach. The business analysis team began to hold prolonged team meetings because there were too many diverse views that the team needed to consider. Due to the diverse opinions and lack of standard procedure, the team’s meetings were deemed unproductive and disorganised. Many team members attempted to address their interests without understanding the broader views.

I have seen people take agile and make it work for their own personal agendas that's not right, get experts in and empower them in order not to be overrun by business, there are strong personalities within the organisation, who can shut people up very quickly (NEB_P9).

6.4.2. Lack of Understanding of Lean Requirements Documentation

In the process of problematisation, which included an attempt to implement the homegrown business analysis approach in both the NEB and SWB, there was a lack of understanding of lean requirements documentation. This indicated that there had to be sufficient requirements documentation and that no aspects should be considered irrelevant (Poppendieck & Poppendieck, 2003). In the NEB and SWB, there was insufficient and inaccurate requirement documentation before the introduction of agile business analysis, so the first attempt at problematisation could not facilitate the inadequate and inaccurate requirements documentation through the enactment of negotiation. This was an indicative sign that the first attempt at problematisation was flawed.

The possible explanation for the flaw was the influence of the existing structures within the network. Some actors employed the power bestowed in the structures to influence and attract other actors, to enrol and remain in the network (Latour, 1999). During this moment, the technology owners had the power and influence, to control the activities of the network.

It was painful because there were a lot of people who were trying to effect transformation who understood the theory but didn't understand how it would be applied on the ground and my role. I was initially the lead BA and then the product owner, but initially as the lead BA I had to take that theory and put it into practice with my team and there weren't people to show you how to do it. Practically the people who tell you how to do it theoretically, but that practical transition was very painful and there was a lot of resistance (NEB_P4).

Another possible explanation is that the idea was mispositioned in the first attempt at problematisation. This happened as the technology owners attempted to problematise the organisation's interest with the rest of the BA team. In both cases, the technology owners were the main actors. In doing so, the technology owners' actions demonstrated a bottom-up approach. As discussed in Chapter Two, it is a circumstance in which employees in the lower levels of the organisational structure seize the opportunity to drive the initiatives. Instead of using a top-down approach, it is clear that the challenge with a bottom-up approach is that too many actors within the network become active participants, which can become chaotic when using the homegrown approach.

6.4.3. Resistance to Change

Despite the clear objective of delivering quality business analysis, there was no common understanding and consensus among the actors about the approach to adopt in addressing the challenges confronting the transitioning process. In some instances, there was resistance to change, which led to disputes among members of the business analyst team. The BAs resisted transitioning from a traditional business analysis approach to an agile one. One of the

reasons for the resistance was that the transitional BAs were no longer required to compile a BRS document. They were then needed to create required user stories. As a result, the network became unstable. Consequently, it became highly problematic for the technology owner to handle the situation. This was the first attempt at problematisation within the NEB and SWB. It was unsuccessful and abandoned, and the team continued with the traditional business analysis approach.

In terms of moving the stories between the different phases from backlog to analysis to design, we need to be a bit more rules on it we have JIRA, and we are using it to track stories, It's utter and total chaos (NEB_P10).

6.4.4. Lack of Mindset Change

The business processes and mindset were vital in the NEB and SWB when transitioning into an agile business analysis approach. This made it very challenging for the agile coaches to present the new way of thinking to the NEB and SWB employees. Some of the organisational business processes have recently been re-engineered and updated. Also, the traditional business analysis methodology and structure were robust and were deeply entrenched in the organisations. However, the business analysis team was flexible and open to new thinking and ideas. According to one of the participants:

mindset shift, it may take longer for people to basically adjust to that because people obviously know a limited certain way of doing it and it becomes a little bit difficult for them to change that. So, in the beginning phases I would say because of that very reason, it might take longer to get things done because people are not used to that approach (SWB_P1).

6.4.5. People Complexity

As people play an essential role in transitioning from traditional business analysis to the agile business analysis approach, the human elements increase the complexity of transitioning to the agile business analysis approach. One specific human-related element which increases the complexity of transitioning to agile business analysis was identified.

- **Time Pressures**

One of the participants, an employee of SWB, felt that the pace at which new business requirements were produced and the fast pace of agile business analysis added to people's complexity in the system development processes. The participants further explained that the complexity of the solution is deteriorated by the pace at which things are moving.

It would be nice to kind of be singing from the same hymn book, in terms of the people on the ground doing the work and the executives. Sometimes we sit and you hear a timeline, and you are like, what informed that for you as a timeline? for me as the person who is going to be doing the work, that does not seem realistic (NEB_P3).

The unsuccessful problematisation shows that the technology owners in both cases lacked the necessary experience to act as the focal actors in the network. The competing interests between the human and non-human actors also made the problematisation more difficult for the focal actor. It was not an easy task for the technology owner to balance and manage the interests of human actors in using technology solutions (non-human actors).

6.5. The Second Attempt of Problematisation

In the NEB, the second attempt at problematisation started six months after the first unsuccessful attempt. This attempt to problematise the same problem was an urgent reaction to finding a suitable solution to their challenges. In the SWB, the second attempt at problematisation came nine months after the first unsuccessful attempt. The second attempt at problematisation in SWB was to urgently find a suitable solution to the challenges they were experiencing from a business analysis perspective.

At that stage, the initial challenges that led the organisations to seek an alternative approach for conducting business analysis had become worse. It included a lack of cohesion among the business analysis team members. Something needed to be done immediately to save the current situation as the quality of business analysis required urgent attention. One of the implications was that the frontline staff were flooded with queries as banking platform software upgrades failed and system functionalities that had worked before were no longer functioning. As a result, there was tension between support and frontline staff, which added to the need for an immediate solution.

The NEB technology owner learnt the agile business analysis approach and became interested. He decided to problematise the new approach of agile business analysis to senior management. This was because the approach was thought of as an attempt to resolve the challenges faced by the business analysis team. Business analysis became a crucial non-human actor in the network as a way of practising business analysis that was received by the support staff.

Table 6.3: Major Challenges Emerging from the Second Attempt of Problematisation

Challenges Identified in the Second Attempt	Quoted by NEB Participants	Quoted by SWB Participants	References
Lack of formal training and learning	6		6
Separation of roles and responsibilities	6	2	8
Lack of buy-in	11	3	14

6.5.1. Lack of formal Training and Learning

In an attempt to problematise the transition to an agile business analysis approach, the business analyst team was made to attend informal training such as boot camps to learn about agile approach. As with the homegrown approach, the process was prolonged as it involved unproductive meetings and discussions in which attempts were made to explain and analyse the bootcamp trainings. As the process got more complicated and unproductive, one of the senior managers employed a management consulting firm. NEB agreed with a consulting firm to appoint an agile coach to provide coaching, training, and consulting for the NEB.

We went to a boot camp at that time it was business, afterward, we played different scenarios. For example, the project manager, swapped roles, with, the product owner, business analysts, business stakeholders scrum masters etc. There was no formal training was offered to the employees at the time (NEB_P7).

6.5.2. Separation of Roles and Responsibilities

The first time the agile coaches were introduced to the technology owner in NEB, they appeared to share roles equally. As the agile coaches became involved in the network's activities, which was to reconsider the current business analysis (traditional) approach, they became more influential and progressively became the focal actors. Due to their wealth of experience, they were the most influential actors in the network formed to transition from traditional business analysis to agile business analysis. In both cases, the technology owners were the main actors in the project's inception. However, that changed with the arrival of the agile coaches.

The agile coaches were influential in using their stock of knowledge to facilitate the steps that had to be taken to execute the tasks involved in transitioning from traditional business analysis to agile business analysis, as briefly described by a participant:

There is a role for consultants or coaches within the business who understand agile and are working with the people, with the business stakeholders (NEB_P5).

The agile coaches presented a roadmap for 'transitioning from traditional to agile business analysis'. The agile coaches guided the team, which was a catalyst for 'transitioning from traditional to agile business analysis. Additionally, the guidance secured orders in the transitioning process. This can be seen as ensuring that problematisation is achieved. This was described by a team member as follows:

The involvement of the agile coach was really good and worked well in the adoption process (NEB_P7).

Although the technology owner was actively at the helm of the activities, this was to ensure that activities and processes were moving and that the agile coaches continued in the team's leadership role. The most crucial feature of agile business analysis that drew the attention of the technology owner, according to one of the participants, was as follows:

Saving on time, saving money getting decisions to be made very quickly, and getting solutions ironed out very quickly, organisations also be more tech savvy because it allows more flexibility in terms of system development and releasing code Independently into production (NEB_P1).

In continuing the problematisation process, the network was expanded by including other people, such as the Chief Technology Officer (CTO). The technology owner problematised the business analysis challenges to the CTO. The CTO bought into the initiative through meetings and detailed presentations.

The technology owner and the main actors at this stage comprised system developers, BAs, business analyst managers, product owners, systems analysts, solution strategies, solution managers, scrum masters, technology owners, CTOs, senior management teams, business managers, agile coaches, traditional business analysis specialists, and the agile business analysis team as shown in Figure 6.2 below.

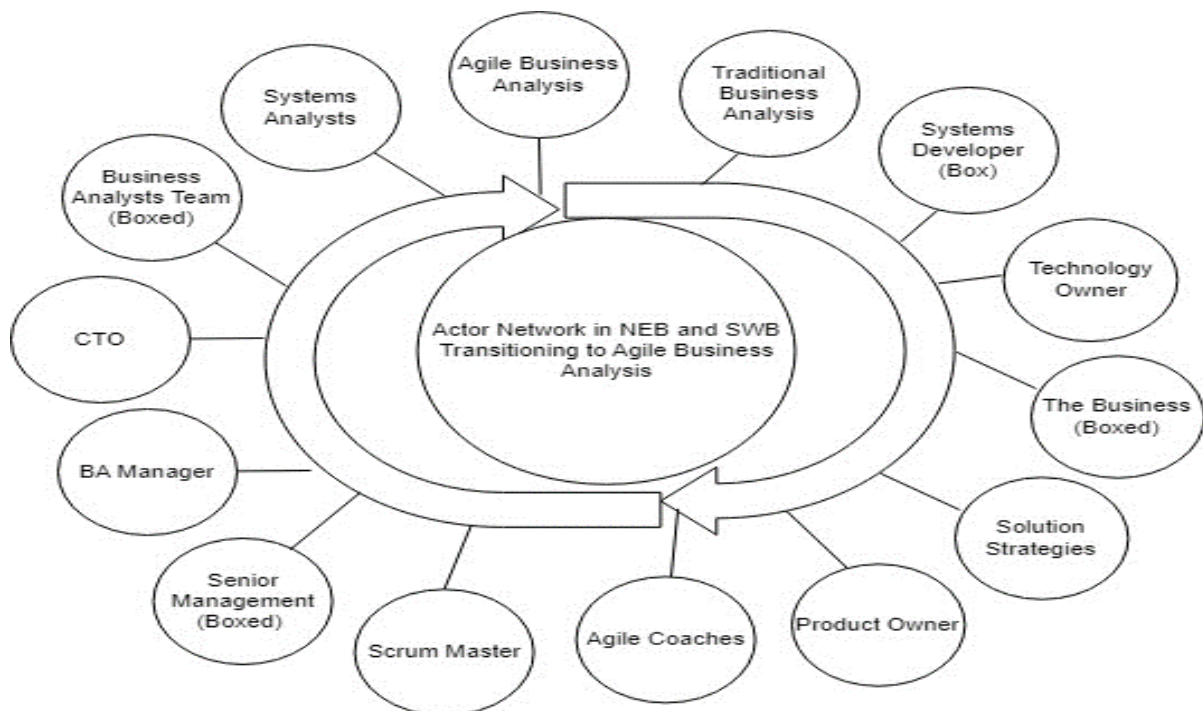


Figure 6.2: Actor Network in NEB and SWB - Transitioning to Agile Business Analysis

6.5.3. Lack of Buy-In

Contrary to the first attempt, the strategic approach undertaken by the technology owner was that if the CTO became involved in problematising the transition to agile business analysis, resistance from other stakeholders would be reduced. The CTO also had the power to make the agile business analysis an OPP. To summarise, the OPP is a strictly defined channel that must be followed for actors to satisfy a network's focal actor's indispensable (Callon, 1984, 1990). The power composition in the network will influence certain actors who were resistant to the original problematisation (Williams-Jones & Graham, 2003).

As the process began, the technology owner clearly stated that without the buy-in and full support of the CTO, it would have been impossible to continue transitioning from traditional business to agile business analysis. The CTO was the financial sponsor of the transitioning project. The official communication about the envisaged *new ways of working* (Nwow) to the business analyst team and the rest of the organisation came from the office of the CTO.

Officially, the CTO presented the agile business analysis approach to the internal stakeholders, including the impacted business unit and the business analyst team. During the presentation, all staff members emphasised the need to support the new business analysis methodology.

If there is no top-level support, it will just be a random team that decides to be agile in isolation. Agile in isolation doesn't bring organisational agility that just bring one team being a little bit more agile and it doesn't help being one agile team within the organisation. I do believe the leadership was heavily brought into the methodology (NEB_P5).

In NEB, It was decided between the CTO and technology owner that the CTO would send bi-weekly news communications to the entire organisation, updating staff members on developing the transition to agile business analysis. SWB decided to send monthly news updates for the organisation, updating staff members on the development of the transition to agile business analysis. In both cases, it was to assure the actors that there were solid power structures in the network and to reduce any possible change resistance from future actors. In such cases, there is a constant problem; hence, the network's actor the network progressed over time.

Communicating the message very clearly so that people can buy into the vision. Communicating the vision very clearly to where we want to go. Communicating the version cuts both ways, (top-down and bottom-up), Because if there is no buy-in from the top, then no one sponsoring right, and if there is no buy-in from the bottom, then no one's producing (SWB_P3).

At this stage, many stakeholders had changed their views and bought into the problematised issue: transitioning from the current approach to a new practice. Accordingly, (Callon, 1990) stated that for a network to be strong, conflicts of interest between stakeholders must not persist. Thus, in both cases, it was suggested that the BA team structure be reorganised so that it reduced resistance by actors. This was to enable growing interest as the project progressed.

6.6. Moments of Translation: Interessement

The interessement stage allows the persuasion of other actors so they become interested and want to be part of the network (Callon, 1984). Interessement may or may not be successful—the successful outcome of interessement leads to enrolment (Callon, 1990).

Various approaches can draw actors' interest in 'transitioning from traditional to agile business analysis. The technology owner adopted one of the approaches, which was to use challenges experienced in the organisation at the time and to lure the interest of the employees. The technology owner emphasised that the approach was most appropriate for addressing the challenges that the organisations were experiencing in the business analysis environment. Also, this was one of the rationales used for problematising the project. Another reason lured

the actors in the business analysis team to begin showing interest was their professional interconnectedness. Many of the BAs belonged to the same professional business analysis body. The moments of translations for both cases were discussed concurrently because both cases are same industry (financial service), both cases provide similar products and services e.g. banking services. The process of transitioning to agile business analysis was also similar in both cases e.g. the use of an external consulting firm, and the use of agile coaches.

Despite the growing interest in the transitioning project, there was resistance from some of the BAs. This was attributed to the deeply entrenched and matured traditional business analysis methodology that prevailed in the organisations (NEB and SWB). The resistance proved some stakeholders wrong who thought the CTO’s presentation, buy-in, and OPP approach would eradicate resistance. Table 6.4 below provides more insights.

Table 6.4: Major Resistance Challenges Identified in the Interesement Phase

List of Interesement Challenges Identified	Quoted by NEB Participants	Quoted by SWB Participants	References
Business Analyst	9		9
Seating Arrangement	7	1	8
Internal Business Stakeholders	5	2	7
Old and Experienced Employees	6		6

6.6.1. Change Resistance: Business Analyst

Resistance in the first attempt at problematisation led to the second attempt. After that, resistance to change was thought to have been reduced or eradicated. Despite the effort in problematising the transitioning initiative, there were doubts about whether it was the most appropriate approach (solution). Thus, in the SWB, the group insisted on eliciting business requirements through a full-day requirement-gathering workshop. A solution manager who participated in this study briefly described the process as follows:

people not wanting to change how they currently work because they have been doing it over and over for many years and it's worked for them, just getting people to adopt to the change and working in an agile way is biggest challenge (SWB_P3).

6.6.2. Seating Arrangement: Change Resistance

Interestingly, one area that attracted some resistance to change within the NEB and SWB was the seating arrangement in the office space. The employees had been in secluded spaces in the past. The new arrangement was to have an open space. This was important as there was a need to change the arrangement to encourage collaboration in face-to-face communication. Also, it helped with the quick resolution of impediments. This was a cultural challenge for many employees, which must be addressed because the seating arrangement affected the organisation's culture.

Agile is nothing more than structured chaos (NEB_P10).

The organisational culture of the NEB and SWB was that employees were provided with a private working space that enabled them to work comfortably in their corner. Each employee had a private working space in the form of a cubicle containing a filing cabinet and a bookshelf. Employees were comfortable in their 'own' little corners. Some employees had family photos on their desks, while others had little plants in the corners of their cubicles. Many employees had the liberty of privacy, allowing them to listen to soft radio programmes and music. Thus, some employees viewed the re-arrangement as an infringement on their privacy. This impacted some employees' interests and required a different motivation to facilitate their acceptance of the new arrangement. The change was made purposely to improve the team and organisational performance. The circumstance was described by one of the BAs as follows:

When we started DevOps teams, everything had to be changed in terms of how we sit, remember agile also promote that we need to see each other more often for collaboration, we need to speak to each other, we need to have better relationships. So, the walls in offices needed to be brought down 10 years ago people had offices, people had corner offices, people had all those things, but now everybody are out there in the open plan. There are less offices there are more open plans, there are now collaborative rooms, war rooms a lot needed to change physically (NEB_P1).

6.6.3. Change Resistance: Internal Business Stakeholders

Another area where there was resistance to change was the lean documentation and business requirements elicitation process. Some of the internal business stakeholders were opposed to this changing process. The business stakeholders were referred to as the internal stakeholders. They did not believe in changing the business analysis method and preferred continuing with the BRS document approach. The approach involved manual processing

whereby the authorities signed off hard copies of documents containing requirements. One of the BAs briefly explained:

Where they still have the old waterfall mindset and I think the biggest transition was the mindset to agile versus the old way of doing things. The challenge for mindset doing what the organisation did and needed to be done (NEB_P6).

6.6.4. Old and Experienced Employees: Change Resistance

Senior employees are those who have practised traditional business analysis for many years. This group of BAs did not see any value in transitioning from traditional business analysis to agile business analysis. Although this group of people neared the end of their years of service (retirement), they made their opposition known. Some of them acted on their resistance to the change. For example, some retired early. Some of these employees were not prepared to entertain any change. This indicated that the interestment process had encountered some challenges. Stated as follows:

They have never to date see for themselves a success story, all they saw is you want to take my project and put it on this path (NEB_P4).

6.7. Addressing Change Resistance

Various strategies were employed to get employees to transition from traditional business analysis to agile business analysis. One of the strategies was 'corridor salesmanship'. The approach entails a drive where agile business analysis becomes part of the organisation's conversations (Noruwana, 2010). For example, in every team meeting, agile business analysis was included as an item on the agenda. Also, informal discussions on agile business analysis often arose between the business analysis team members, which necessitated the promoters of the new approach opportunities to explain further and correct the misinterpretation surrounding the project of transitioning into agile business analysis.

Another strategy in transitioning from traditional business analysis to agile business analysis was providing basic agile and scaled agile framework (SAFe) training to all the actors impacted by agile business analysis. An external firm of agile coaches provided the training. The training focused on clarifying the agile business analysis role players, the key principles of agile business analysis, agile business analysis practices, and the required tools.

Upon completing the training, the chosen BAs were made to understand how the documentation aspect of agile business analysis is conducted. The way the coaches in the program emphasised on the significance of focusing on the system's functionalities. This helps

to address and reduce resistance by some employees. Also, the agile coaches highlighted the need to avoid lean documentation. However, only requirements should be documented to get the system functionality into the development environment. In addition, the coaches focused on the priorities of the BAs by highlighting the prioritised requirements and user stories in the sprint. The BAs knew the intended business benefits to ensure they produced sufficient documentation in the required time. These actions aimed to persuade the BAs who were resistant to change to become more interested in their new anticipated roles in the agile business analysis environment.

During the research interview, a BA who had previously been a lead business analyst stated that he had presented several motivations and explanations for 'transitioning from traditional to agile business analysis to encourage all stakeholders to buy into the concept. This was also a strategy to attract more interest from the employees. A BA described the process as:

People still have blocker in their minds even though the blockers were gone in the culture, the blockers were still in people's mindsets. It became a lengthy way of trying to make sure that people buy into it and people get educated. Education became a continuous thing in the process. Some BAs were in their corner they only speak to certain stakeholders, new ways of work is saying that BAs need to be in touch with their product owner every day. And that is something that BAs didn't quite do. BAs sat in workshops took requirements once and then they went and hid in their corner for a week or two documenting the requirements not speaking to stakeholders then come back with a document. Now agile BAs need to get out of the shell they need to see stakeholders daily (NEB_P1).

One of the objectives of the PO was to ensure that all actors were presented with helpful information and materials that would help them improve their understanding of the agile business analysis. In this regard (Vaagaasar, 2006) explained and highlighted the importance of an agreement between stakeholders in a network and to enrol other stakeholders.

6.8. Moments of Translation: Enrolment

In ANT, enrolment means undertaking a proposed or imposed role by the focal actor in a network (Noruwana, 2010). At this stage, two very interesting main activities about the cases studied were the NEB and SWB. Firstly, the influence of some actors was prevalent in the organisational structure (hierarchy). Secondly, some employees quickly gained control power because many believed that agile business analysis would work in their organisations.

The focal actors practicalise their interestment through actions that describe the roles that they are to be played in enacting the OPP (Heeks & Stanforth, 2015). The CTO formally

presented the transition from traditional business analysis to agile business analysis to the organisations. This means that the CTO has enrolled in the project. After that, the CTOs' positions became clearer, showing that they were involved in the project and defined their roles. One of the CTO's roles was sending official communication to all stakeholders about the transition into an agile business analysis approach.

Communicating the version cuts both ways, (top-down and bottom-up), Because if there is no buy-in from the top, then no one sponsoring right, and if there is no buy-in from the bottom, then no one's producing (SWB_P3).

Enrolment needs actions in order to endorse the defined roles, things are truly formed and amended during action (Heeks & Stanforth, 2015). The buy-in by the CTO, agile coaches, and many employees created stability in the project. This made it hard for opposing stakeholders not to join and become involved in the activities of the network of people who have enrolled in the initiative. Also, this group feared they would be isolated as the transition from traditional business analysis to agile business analysis materialised. Consequently, the business analyst team had to enrol since they would primarily implement the transitioning processes and activities.

With the assistance of the agile coaches, the BAs learnt to appreciate the new methodology and their roles in the project. The business analyst roles within the traditional business analysis approach were redefined. One of the things that was made clear and acknowledged was that the BAs would no longer be required to produce a massive volume of business requirement documentation that contained unnecessary system functionalities.

The project requirements were split, and various teams were formed based on project requirements and skill sets. This was another example of how the enrolment of employees was increased. In formulating the teams, the focal actor attempted to balance the skillsets by aligning responsibilities with the individual's strengths.

At this stage, the team members enrolled to assert their relevance in the project and the organisation. This gave some team members a sense of association and made them feel they were helpful to the organisation. In reciprocation, team members were notified that they would maintain their respective employment roles and responsibilities.

As part of transitioning into agile business analysis, team members were advised that they could not be addressed by their titles or roles in the organisation but only as team members. This was one of the areas of agile business analysis that some team members resisted. The team members believed that this might cause misunderstanding in the team.

The training provided by the external firm also clarified the various roles entailed in the agile business analysis approach. The clarification of the roles was a motivation for some employees to enrol in the project. As previously stated, this included redefining each actor's role in the network. Every staff member who was interested and enrolled in the project was encouraged to attend the training to transition into agile business analysis.

This included BAs, developers, systems analysts, solution strategists, and product owners. Once the training was completed, all actors in the network acknowledged their roles in the agile business analysis environment. At that stage, all the stakeholders had enrolled and understood their roles and responsibilities in the project.

6.9. Moments of Translation: Mobilisation

This is the last stage of translation. ANT is the stage where the network (project) is represented by an authorised spokesperson legally mandated to speak on behalf of other actors (Blackburn, 2002). Any actors who spoke against the network's position would be stopped or disregarded. Also, such opposition could have made the network weaker and more unstable. However, the focal actors aim to stabilise the network, through actions that stabilise the actors involved with implementation of the agile business analysis approach action (Heeks & Stanforth, 2015).

In NEB and SWB, at the mobilisation stage, the main actors attempted to control the other actors in the network by guiding them to adhere to what they had decided on during the enrolment stage. This was crucial to ensuring that the direction of the main actors was headed in the initially anticipated direction. The goal was to ensure that actors remained focused on the primary objectives of the network. This strategy also played an essential role in stabilising the network. Mobilisation determines the degree of success of transitioning into agile business analysis (Stanforth, 2006). Thus, groups (networks) such as the agile committee and coaches were selected to speak on behalf of the project. In each group, a spokesperson was nominated.

- **Agile Coaches**

In the NEB and SWB, the agile coaches were the most noticeable spokespersons in the organisations. The spokespersons provided leadership and guidance about things that were required for one to be successful. Also, the spokespersons proposed the best approach for transitioning into agile business analysis. The agile coaches represented the technology owners' interests in mobilising the network. They guided the SMs, the BAs, the POs, the

developers, and the business stakeholders. They provided comprehensive detail on how agile business analysis works.

Having agile coaches coming in and doing more than just training but actually being there to help set up the ceremonies and get involved in setting up ceremonies and getting people committed (NEB_P4).

Although the transition process was deemed successful, assessment was needed. About eight months after transitioning from traditional business analysis to agile business analysis methodology, the agile coaches were invited to assess whether the actors in the network were executing tasks that were defined and agreed upon as actors enrolled in the project. This was the second visit by the agile coaches, which showed that they had positively impacted the project's progress towards success. Their role as spokespersons was crucial to the success of the transition to agile business analysis. After eight months, the significance of their visit was to assess and identify any potential deviations from the agreed tasks and to assist in correcting them.

- **Problems**

The challenges that influenced the technology owner to transition to an agile business analysis approach included quality, productivity, and predictability. The challenges were the most critical factors the agile coaches kept reminding everyone about (Noruwana, 2010). The organisations also paid attention to the challenges. Many of the actors in the network were very interested in observing how the agile business analysis would address the challenges.

- **Agile Roles and Responsibilities**

One of the roles and responsibilities of the agile business analysis was to act as a spokesperson in the network. Every actor who enrolled in the network was constantly reminded about their roles and responsibilities as the project progressed. The mobilisation was strict in their dealings with the business analysis team because they were responsible for holding daily team meetings where they were expected to account for their role tasks.

Agile business analysis practices have six roles (Schwaber & Beedle, 2001). These roles are SM, PO, agile team, customer, end-user, and management. Table 6.5 below presents the conceptual responsibilities related to each role and the practical responsibilities implemented within the NEB and SWB.

Table 6.5: Agile Business Analysis Roles and Responsibilities in the NEB and SWB

Role	Conceptual Responsibility	Practical Responsibility in the NEB and SWB
Scrum Master	To ensure that agile practices, values, and rules were conducted in the business analysis project. To collaborate with the team as well as business stakeholders to remove impediments. This responsibility had to be assigned to one team.	In the NEB and SWB, this role was not assigned to one team. In the NEB, one SM is responsible for the three agile project teams, whereas in the SWB, one SM is responsible for four different agile project teams simultaneously.
Business Analyst	Business analysts are responsible for requirements elicitation, analysis documentation, and management; business analysts use workshops, scenario mapping, observation, prototyping, interviews, brainstorming, etc., to gather requirements from relevant sources.	BAs were responsible for requirements elicitation and user stories documentation. In both cases, the BAs mainly used workshop and observation techniques to elicit requirements, and the business stakeholders and POs mainly provided requirements.
Product Owner	Was responsible for the project team and was required to lead the process of identifying the deliverables in the sprints.	The PO's responsibility was executed as advised by the agile business analysis. In both cases, product backlog management was also the responsibility of the POs. This ensured that the team focused on the required system functionality and collaborated with the business's stakeholders.
Scrum Team	This is the core team of the agile business analysis project. Self-organised and has to be empowered to make decisions—no specific role allocation. Team members are referred to as team members.	The team members were individuals with specific skills required to deliver system functionalities. Both categories contradicted the agile advice. Team members were referred to not only as team members but also according to their titles or roles, such as business analyst, developer, tester, process engineer, and systems analyst.
Customer	Partakes in activities relating to the product backlog.	There was no designated customer role in the NEB and SWB. All actors representing the business stakeholders were considered part of the business.
End-User	These were the people who would be using the system that was being analysed and developed. Their responsibility was to ensure that their challenges were acknowledged and addressed.	In the NEB, the end-users were considered as the business, whereas in the SWB, the end-users role was reserved for business units' representatives, who were also called business reps.

Role	Conceptual Responsibility	Practical Responsibility in the NEB and SWB
Management	Took final decisions and was involved in setting the team's objectives and requirements.	When transitioning into agile business analysis in the NEB and SWB, all the actors representing their business areas were called 'Stakeholders'.

- **Agile Business Analysis Practices and Tools**

As discussed in the literature review in Chapter Two, agile business analysis utilises specific tools and management practices. These are applied at different stages in the agile business analysis phases (Noruwana, 2010). These tools assist with avoiding the confusion that can come from the unpredictability and complexity of agile business analysis. Table 6.6 below illustrates the various tools and practices implemented in the NEB and SWB.

Table 6.6: Agile Business Analysis Practices and Tools as Applied in the NEB and SWB

Practice/Tool	Practice/Tool Description	Practice/Tool in the NEB and SWB	Benefits of Practice/Tool in the NEB and SWB
Product backlog	Describes everything that is required for the final product. Has to record work that needs to be done to complete the project. It includes prioritised and up-to-date business and technical requirements. The PO is responsible for maintaining the product backlog.	The product backlog was used in the NEB and SWB. That is where the sprint backlog was extracted from. The PO prioritised the product backlog. The product backlog includes epic stories. The team selects the highest prioritised items and works on completing them.	Backlog allows the teams to quantify and schedule the work to be completed in a sprint.
Effort estimation	This iterative process estimates the workload and effort required to complete a particular backlog item. It was expected to be completed as more information became available. The PO and the agile team are responsible for this task.	This was not used in the NEB. The practice was not in the interests of the actors. The technology owner and the team believed that, based on experience, they could assess and estimate the timeframe to complete tasks. While in the SWB, the practice was utilised to understand the timeframe estimated to achieve tasks. The	The NEB did not utilise it; the team depended on experience to estimate tasks. It was well utilised in the SWB as it enabled the team to estimate how long a particular task takes.

Practice/Tool	Practice/Tool Description	Practice/Tool in the NEB and SWB	Benefits of Practice/Tool in the NEB and SWB
		estimate was used to manage business stakeholders' expectations.	
Sprint	This approach analyses requirements and adapts requirements changes, resources, and technology solutions. This period usually takes two to three weeks, after which the requirements are handed over to the developer to produce a working functionality.	The technology owner and the business analysis team initially accepted the sprint. This was one of the agile business analysis attributes that attracted the team. Two-week sprints were used in the NEB and SWB and ran smoothly. Requirements functionality would not always be built after a sprint due to dependencies, but the requirements would be thoroughly analysed and ready for development.	The value obtained from this practice is a continuous learning curve. The team constantly improved the way they conducted requirements analysis. The productivity, quality, and dependability improved.
Sprint planning meeting	This is the meeting between the agile project team and the SM to plan how requirements are elicited and analysed to ensure the requirements are ready for development during a sprint.	In both the NEB and SWB, sprint planning meetings were viewed as essential. The meetings were intentionally short because certain agenda items had enough information, and the potential resources were already assigned.	The benefit of this practice was that the team began the sprint with a clear allocation of tasks they would need to complete for the next two weeks.
Sprint backlog	The sprint backlog contains the workload for the sprint. In a sprint planning meeting, the PO, SM, and team select these items from the product backlog.	The sprint backlog was used in the NEB and SWB. This is a representation of a two-week deliverable for the team.	This tool's benefit is that it helps the team keep a visible record of how the sprint is progressing.
Daily scrum meetings	The daily scrum meeting assists in keeping a progress report of the tasks assigned to team members. This meeting is usually fifteen minutes	In the NEB, the scrum meetings were held three times a week (Monday, Wednesday, and Friday)—the scrum meetings, which took	The sprint meetings kept team members focused. This also highlighted some challenges

Practice/Tool	Practice/Tool Description	Practice/Tool in the NEB and SWB	Benefits of Practice/Tool in the NEB and SWB
	<p>long. Also, three fundamental questions were usually addressed: What did you do yesterday? What will you be doing today? Are there any impediments? Usually, the meetings are facilitated by the SM.</p>	<p>longer than the fifteen minutes that is recommended. In the SWB, they held daily scrum meetings five times weekly as recommended. However, their daily scrum meetings took longer than the recommended fifteen minutes. The daily scrum meeting took longer to allow the SM to receive more detailed information about what was happening in the team. This worked well for the NEB and SWB and kept the teams on track regarding sprint deliverables.</p>	<p>impeding the teams' progress so the SM could address them.</p>
Sprint review meeting	<p>This meeting is where the SM presents requirements analysis to the business stakeholders and the PO. This meeting is usually held at the end of each sprint period. In this meeting, the following sprint items are discussed.</p>	<p>The analysed requirements were not developed or implemented due to dependencies. However, the completed requirements were shown during the sprint review meetings, and how the functionality would work was presented. After the presentation, the business stakeholders identify the following functions based on priorities.</p>	<p>In the NEB and SWB, this was an important meeting. It was an opportunity for the team to present the requirements they had analysed in the previous two weeks. This marks the completion of a requirement the business must sign off on.</p>
Sprint retrospective meeting	<p>This is an agile team meeting where the team assesses their tasks to understand better what they did well, what they need to stop doing, and what they need to start doing. In agile, this is a technique to encourage</p>	<p>In the NEB and SWB, retrospective meetings were adopted. It was an opportunity to reflect on the team's performance in the past two weeks and take corrective action to improve it.</p>	<p>This practice benefits the team in terms of improved productivity and togetherness. Challenges that were encountered during the sprint</p>

Practice/Tool	Practice/Tool Description	Practice/Tool in the NEB and SWB	Benefits of Practice/Tool in the NEB and SWB
	team learning and improvement.		period were addressed. This promotes learning within two weeks.
User stories	This is a description of the requirements. It is a narrative of the stakeholder's or customers' perspectives.	In NEB and SWB, user stories were obtained from the stakeholders and product owners. In both cases, user stories were gathered by the BAs. The product owners assign completed user stories to the development team for coding.	The user stories were practised in the NEB and SWB and worked well. There was visibility on the user stories being analysed or developed as they appeared on a team's Jira board.
Small agile team	Agile business analysis works on the principle that a team should comprise five to nine members.	In the NEB and SWB, there were 8 and 11 members in a team, respectively. This means both cases aligned with the principle of small agile teams, although the SWB was slightly beyond the recommended range.	From both organisations' perspectives, it was more straightforward to work with small teams as there was togetherness in the team.
Agile team sitting together	Agile business analysis recommends that team members sit close to each other to encourage and foster collaborations, face-to-face communication, and quick resolution of challenges.	Although members of the teams sat close to each other in both cases, this did not stop email communication between individuals. There was still that aspect of the need to safeguard oneself by sending an email and keeping documentation rather than having face-to-face communication. This was one aspect that required development in both cases. Developing this aspect would encourage trust among the team members.	Challenges were addressed much faster, and there was visibility in team members' activities. This influenced improvement in team performance.
List of impediments	This is a board where everything that impedes	In both cases, the SMs keep the list of	The entire team knew the

Practice/Tool	Practice/Tool Description	Practice/Tool in the NEB and SWB	Benefits of Practice/Tool in the NEB and SWB
	the progress of the Agile team is presented and discussed.	impediments and make it visible to the entire team. The SMs are responsible for addressing the impediments and providing feedback to the team members who identify the impediments. The SM's feedback was not dependent on the team's scheduled meetings because some impediments were critical and sometimes delayed the progress of the team members or the entire team.	impediments and when they had been addressed.

6.10. Highlights of Mobilisation

This section presents the highlights of the mobilisation phase in the transition from traditional business analysis to an agile business analysis approach. A total of four highlights were identified in the mobilisation phase. These highlights are discussed in this section.

Table 6.7: Major Highlights Identified in the Mobilisation Phase

List of Mobilisation Highlights	Quoted by NEB Participants	Quoted by SWB Participants	References
Scrum Master	3	1	4
Visible Tools	5	1	6
Small Teams	6		6
The Team Members	4	1	5

- **Scrum Master**

Agile business analysis recommended that the team should have one dedicated SM. This was not the case in the NEB and SWB. One SM was allocated to multiple agile teams. The justification for this was that there were limited human resources for experienced and skilled SMs. Also, there was a demand for SMs within the organisations in this study; there are

insufficient trained agile human resources in South Africa (Friedrich & Van Der Poll, 2007). Although this statement was made over a decade ago, the situation has not changed, as revealed by this study. Due to the constraint, a compromise was reached in the NEB and SWB to appoint and allow one SM to perform the role for multiple agile teams.

- **Visible Tools**

Agile business analysis visible tools include the product backlog, sprint backlog, effort estimation, and impediment list, which were accepted in the NEB and SWB. The tools were deployed as prescribed by agile business analysis. In both the NEB and SWB, the teams maintained that the progress made in the project must be visible enough to be seen by the stakeholders. Also, the teams argued that this method would contribute positively to the motivation of team members because their progress was noticed. Additionally, visibility tools track individuals progress from the teams perspectives.

- **Small Teams**

Agile business analysis recommended that agile teams should be between five and nine members (Noruwana, 2010). Before transitioning into agile business analysis in the NEB and SWB, the project teams comprised of between ten and fifteen employees. Members of this group were specialised in different areas. The organisation tried to reduce the size of the team. In doing so, the agile coaches divided the team into smaller teams. The new teams (or smaller teams) worked autonomously and focused on different agile projects. Some teams had nine, and others had eight or eleven team members. The members had a good understanding of their roles and responsibilities within the team. The structure of the organisations proved that even though agile business analysis recommends a maximum size of nine team members, it is often not feasible.

- **The Team Members**

Agile business analysis recommends that everyone in the team be referred to as team members. However, the teams ignored the recommendation and continued using employment or professional titles. The team argued and maintained that if they adopted the recommendation, it would confuse the business stakeholders. Then, some individuals might be misunderstood. The team further indicated that changing the name of their roles to team members meant that their area of specialisation would be undermined. Additionally, some member of the team had different views, based on which they argued that in event where a new member is enrolled, it will be difficult to differentiate the skillsets needed. This revealed that many of the team members prefer defined roles and responsibilities. This suggests that

some members prefer to work in isolation rather than a team effort. This stance may be viewed as a social influence.

Another significant issue relating to the teams in both organisations is the seating arrangements. Agile recommends that team members sit close to each other because it encourages collaboration and face-to-face communication (Noruwana, 2010). In both respects, this recommendation was adhered to. However, some team members maintained the type of privacy they were used to. The atmosphere did not encourage collaboration or face-to-face communication, as emails were used to communicate among team members. Another reason highlighted by the participants was that people saw the need to protect themselves by continuing to use emails to communicate because it is viewed as evidence-based. This suggests that there was a lack of trust among the team members. Emails were used for keeping records of the activities that were communicated within the team. Trust among team members requires more attention.

6.11. Benefits of Transitioning to Agile Business Analysis

This section presents the benefits of transitioning from traditional and agile business analysis approaches. These new benefits can only contribute to the organisation's bottom-line growth and development, and these associated benefits are fully realised once they (new frameworks and processes) are completely embedded and disseminated in the organisation (Hall & Khan, 2003). The transition to agile business analysis requires commitment, dedication, and funding from the organisation. Fourteen individuals were interviewed, and the feedback received was consolidated into eleven benefits of transitioning to agile business analysis approaches. This was further summarised into six themes: business analysis quality, collaboration, improving visibility, transparency within the team, and requirement flexibility. These associated benefits are discussed in this section.

Table 6.8: Benefits Identified with the Transitioning to Agile Business Analysis

List of Identified Benefits	Quoted by NEB Participants	Quoted by SWB Participants	References
Improved Business Analysis Quality	6	2	(Linders, 2012)
Improved Collaborations	7	3	(Nee, 2012)
Quicker Time to Market	6	3	(Gregory, Lassenius Wang & Kruchten, 2021)
Requirement Flexibility	7	1	(Feldmann & Burchardt, 2021)

List of Identified Benefits	Quoted by NEB Participants	Quoted by SWB Participants	References
Improved Visibility and Transparency	4		(Donaldson, 2018)
Increase Productivity	4	1	(Linders, 2012)

The participants stated that the organisations achieved more than they expected from the project, transitioning into agile business analysis. One of the participants explained it as follows:

One of the fortunate things with agile business analysis is that enable deliverable to the client is not something that happens after a very long period, it basically seeing the value instantaneously (NEB_P8).

6.12. Improved Business Analysis Quality

Transitioning into agile business analysis helped NEB and SWB to address the business analysis quality challenges they were experiencing, such as providing the BAs with the ability to break requirements into smaller user stories that were self-explanatory, easy to manage and develop in small chunks, as described by a business analyst.

The biggest impact has been the conversations with business, because at some point business were expecting business analysts to sit with them and gather requirements. Requirements was kind of like a list of things that business wanted the system to do for them, but transitioning to agile user stories and acceptance criteria, there was a lot of teaching that needed happen business stakeholders, product owners, SME to say now business analysis has moved requirements to User stories. This is how to write user story, then acceptance criteria which is required to test (NEB_P3).

There is constant analysis in agile business analysis, which prevents the accumulation of poor business analysis and ensures reasonable requirements analysis.

6.12.1. Improved Collaborations

One of the benefits of transitioning into agile business analysis is that collaboration between business stakeholders and BAs improved. This is attributed to better communication between the business stakeholders and BAs, as briefly explained by a business analyst:

It gives BAs an opportunity to have better working relationships. It's not just agile in terms of documents. Agile says that change everything else, so you are having a closer relationship

with the product house. You are having a closer relationship with your stakeholders altogether because you get to see your stakeholders on a day-to-day basis as opposed to having at once a week (NEB_P1).

6.12.2. Quicker Time to Market

One of the essential benefits of agile business analysis is the ability to get to the market quicker. The iterative nature of agile business analysis ensures that business analysis requirements are delivered incrementally. This allows the NEB and SWB to be first in the market and respond to market changes.

The world we live in is moving at a very fast pace, 4IR is no longer just a thought. It's something that is happening every day. Organisations cannot be ignorant and avoid being agile, if organisation is not agile and conduct business analysis in the old ways, and doing things at it own pace, the organisation lose market share, Client are to go where agility is happening (NEB_P1).

6.12.3. Requirement Flexibility

Agile business analysis supports self-organising teams and promotes requirement changes, thus allowing for flexible requirement priorities. An agile business analysis approach means that business stakeholders or the PO can adjust the requirements according to the business value or changes in the market environment.

Business analysis from an agile environment is that you constantly in a state of analysis, there is no upfront analysis and then you step back, and somebody develops it. You are doing upfront analysis to get the cost grained business requirements (NEB_P10).

6.12.4. Visibility and Transparency

With an agile business analysis approach, there is a significant increase in visibility and transparency. The openness allows the business analyst teams and stakeholders to share the same view, which supports and enables good collaboration and communication.

Transparency and the eligibility for the squad works together for example, like the standups allows everyone to monitor and drive blockers agile is a framework that allows for transparent also to deliver things in increments (NEB_P5).

Team work is visible to everybody where we can be able to see every day and know what the team is responsible for (NEB_P1).

6.12.5. Increase Productivity

One of the main reasons for the NEB and SWB to transition from a traditional business analysis method to an agile business analysis approach was to address their productivity challenges. Agile business analysis helped them to manage challenges through improved collaboration and quick information sharing, which allowed the team to stay focused on tasks and deliverables. According to one of the participants:

The transitioned has brought projects being able to deliver higher, quicker value to customers. And not waiting for long periods of time before they can offer the customer a working solution (NEB_P6).

Transitioning into agile business analysis seemed to have addressed the business analysis challenges in the NEB and SWB. One can also draw from the BAs that they gained more benefits than expected.

This demonstrates that 'transitioning from traditional to agile business analysis' benefits the organisation.

Table 6.9: Summary of Benefits Transitioning from Traditional Business to Agile Business Analysis Approach: Themes and Supporting Empirical Evidence

Benefits of Transitioning from Traditional Business to Agile Business Analysis Approaches	Supporting Empirical Evidence	Supporting Literature
Business Analysis Quality	Section 6.10.1	(Girvan & Paul, 2017)
Collaborations	Section 6.10.2	(Nee, 2012)
Quicker Time to Market	Section 6.10.3	(Gregory, Lassenius Wang and Kruchten, 2021)
Requirement Flexibility	Section 6.10.4	(Girvan & Paul, 2017)
Visibility and Transparency	Section 6.10.5	(Donaldson, 2018)
Increase Productivity	Section 6.10.6	(Gregory, Lassenius Wang and Kruchten, 2021)

6.13. Summary

This section summarised the challenges associated with the transitioning to agile business analysis approaches; 140 challenges were identified from the interviews, which were consolidated into twelve themes considered challenges to the transitioning from traditional business analysis to an agile business analysis approach. The themes are listed in Table 6.10 below.

Table 6.10: Summary of Challenges Associated with the Transitioning to Agile Business Analysis Approach: Themes and Supporting Empirical Evidence

Challenges of Transitioning to Agile Business Analysis Approaches	Supporting Empirical Evidence	Supporting Literature
Advancement of individual analysis approach	Section 6.4.1	(Jovanovi, Mesquida, Mas & Colomo-Palacios, 2020).
Lack of Understanding of Lean Requirements Documentation	Section 6.4.2	(Ghobadi & Mathiassen, 2017).
Resistance to change	Section 6.4.3	(Dikert, Paasivaara & Lassenius, 2016).
Lack of Mindset Change	Section 6.4.4	(Martins & Zacarias, 2017).
People complexity	Section 6.4.5	(Gandomani & Nafchi, 2016).
Lack of formal training and learning	Section 6.5.1	(Dikert, Paasivaara & Lassenius, 2016).
Lack of Separation of roles and responsibilities	Section 6.5.2	(Nuottila, Aaltonen & Kujala, 2016).
Lack of Buy-in	Section 6.5.3	(Miller, 2013).
Change Resistance: Business Analyst	Section 6.6.1	(Dikert, Paasivaara & Lassenius, 2016).
Seating Arrangement: Change Resistance	Section 6.6.2	(Gandomani & Nafchi, 2016).
Change Resistance: Internal Business Stakeholders	Section 6.6.3	(Waardenburg & van Vliet, 2013).
Old and Experienced Employees: Change Resistance	Section 6.6.4	(Dikert, Paasivaara & Lassenius, 2016).

While transitioning to agile business analysis, at the start, it appeared to be an experiment where the NEB and SWB attempted one business analysis approach that failed. The involvement of agile coaches assisted in the smooth transition from transitional business analysis to an agile business analysis approach. It is also imperative to highlight that the NEB

and SWB did not implement all the features of agile business analysis but chose those that would address their immediate challenges. The transition from traditional business analysis to agile business analysis produced a better outcome than was anticipated for the NEB and SWB.

It is clear from these examples that the NEB and SWB Banking organisations relied heavily on IS/IT systems. They were eager to develop good quality products. This increased the pressure on their respective IT departments to look for a business analysis approach that could address their challenges. In attempting to get to a stage where transitioning to agile business analysis, some repositioning of stakeholder interests had to take place. Network actors underwent adjustments, negotiation processes, and interest translation to enrol other network actors.

CHAPTER SEVEN

Discussions and Interpretations

7.1. Introduction

This chapter presents the interpretations of the study. The interpretations were reached from the data analysis using ANT as a lens, as explained in Chapter Six. Two organisations were used in this study. Thus, there is an intent to generalise the findings reached in this study. It is appropriate for a researcher to generalise findings obtained using multiple case studies. What would be inappropriate is to pretend that this is the only research study method (Lee & Baskerville, 2003). Using a multiple case can be based on the cases the researcher selects and how the case was selected. Case selection should depend on the case appropriately representing the significant population.

As discussed in Chapter Four, the research study was conducted using two South Africa-based organisations. Even though the organisations have operations across the African continent, their head offices were in South Africa at the time of this study. This means that the head offices have control over the other offices. This makes these organisations an appropriate representation of South African banking organisations.

The chapter is structured as follows: Section 7.1 presents the challenges of transitioning from traditional business analysis to an agile business analysis approach. Section 7.2 presents the benefits of transitioning to an agile business analysis approach. Section 7.3 discusses challenging factors that influence and manifest in transitioning from traditional business analysis to an agile business analysis approach.

It is evident from the data analysis that despite the attractiveness of the agile business analysis approach, organisations face various challenges in their attempts to adopt the strategy. Thus, organisations must know the challenges and understand how to address them. This study empirically reveals some of the challenges that can contribute to the successful implementation of the approach in an organisation. Based on the findings, an organisation must understand the characteristics of an agile business analysis approach that could add the required value to its environment. This helps with a smooth transitioning process.

7.2. The Challenges and Benefits of the Transitioning Process

This section covers the challenges and benefits of transitioning from the traditional business analysis approach to the agile business analysis practice.

7.2.1. Challenges Associated with Transitioning

Research question answered: What are the challenging factors in transitioning from traditional business analysis to agile business analysis practice?

Interpretations: The challenges associated with transitioning into an agile business analysis approach are many and critical. Therefore, organisations must understand the common difficulties better to ensure a smooth transition. Hence, business and IT must be aligned and work together to solve those challenges correctly. The agile business analysis approach requires stakeholder collaboration (Maurer & Melnik, 2006). Business and IT need to understand the necessity for cooperation in transitioning into agile business analysis practice.

Consequently, when both business and IT stakeholders are not aligned, it is difficult to understand the common challenges. Thus, it becomes problematic to transition into an agile business analysis approach. One of the reasons for the challenges is that some actors have personal interests in mind rather than the organisation's agenda. It is, therefore, crucial to have a mutual understanding of the solution to address the challenges.

Discussion: This study established that the challenges in the two organisations prompted the transition to an agile business analysis approach. The challenges include poor quality of business analysis, low productivity, unpredictability of activities, and a lack of or poor delivery of the promised system functionality. Some challenges associated with transitioning into agile business analysis practice include inadequate direction and support from senior management during the transitioning process, lack of adherence to the agile business analysis principles and values by some managers, and control that does not allow agile teams to self-organise and decide on priorities.

Other challenges associated with transitioning from the traditional approach to agile business analysis are a lack of understanding, OPPs, and human resource constraints. Some team members were not fully dedicated to the agile business analysis. This group of people pretended to be performing business analysis in an agile way merely to appease management.

The pretence was revealed when it was discovered that the employees had not perceived the correct principles and value in appropriately employing agile business analysis approaches. There was no OPP, which led to non-adherence to agile business analysis processes and ceremonies. The study also uncovered inadequate SMs because of human resources constraints in South Africa, which are challenges associated with transitioning to an agile business analysis approach.

In addition, four detrimental challenges were associated with transitioning from the traditional approach to agile business analysis practice in organisations: they are resistant to change, lack an adequate inspection process, have funding uncertainty, and lack organisational structure. These challenges resulted in transitioning from the traditional business analysis approach to agile business practice in the two study organisations used as cases.

Change resistance is the mentality of refusing to learn and adapt to new business analysis approaches in organisations. This was a risk in some of the activities during transitioning. There was a lack of inspection and a poor adaptation attitude by some members of the teams. This meant that they failed to examine challenging areas to enhance performance. Also, transitioning into agile business analysis was negatively affected by funding. There was uncertainty about funding for current and future projects. As a result, teams could not deliver requirements for new functionality as promised. The study also uncovered that a hierarchal organisational structure is inappropriate for the new agile business analysis environments. Some examples of the implications are that organisational seating arrangements did not encourage and support collaboration and that legacy roles were inefficient and created conflict, which caused some team members to revert to traditional business analysis methods because they felt overburdened while trying to adapt to the new agile roles.

Contribution: Before transitioning into an agile business analysis approach, an organisation needs to anticipate the potential challenges to address them. This means that organisations must acknowledge the existence of the challenges and be willing to find proper solutions to them before attempting to address them. That will allow commitment to be built among the employees.

7.2.2. Benefits of Transitioning

The research question answered: What are the benefits of transitioning from a traditional business analysis approach to an agile business analysis approach?

Interpretations: This section identifies the benefits of transitioning from traditional business analysis to agile business analysis practice. The study reveals that some business analysis teams within the organisations were empowered and encouraged to work independently. This group of employees were self-organised and sufficiently encouraged to decide on the priorities of their tasks. The business analysis team also enjoyed better visibility of the end-to-end products and the systems development process within and across functional teams. This was because the team could interact and collaborate with other teams frequently. The study found that business analysis productivity and quality improved due to better cooperation and

collaboration between business and IT. Additionally, the study found improved team dynamics and an overall improvement in the organisational culture.

Discussion: Transitioning from traditional business analysis to an agile business analysis approach is expensive and extensive. It requires funding and commitment from all organisational levels. The study identified thirteen benefits of transitioning into an agile business analysis approach. These benefits were further summarised into eight themes (factors) ranging from improved productivity and team delivery to development and empowerment, visibility, collaboration and cooperation, communication and transparency within the agile project team, and improved team cooperation. These and other benefits are presented in this section.

One of the benefits of transitioning from traditional business analysis to an agile business analysis approach in an organisation is the emerging empowerment and autonomy of teams. This is in line with the value of agile business analysis. The study uncovered that when teams are empowered, they can make quick and effective decisions. This forms the direction of the business analysis project. In addition, when teams are self-organised and independent, they can choose and manage their priorities on behalf of the organisation. Self-organised and autonomous teams to enable a successful agile transitioning process (Stray et al., 2018).

Another benefit of transitioning from traditional business analysis to an agile business analysis approach is the opportunity to have complete visibility of all tasks and activities across functional teams. This includes interacting with the team members, which helps with project updates, progress, and impediments. Visibility and transparency allow human beings to make good decisions, enabling teams to remove obstacles and adapt to an organisation's new way of working (Tavares et al., 2019).

The improved collaboration and communication between team members and individuals were noticeable, as revealed by the study. This restates the significance of placing individual interactions over 'processes and tools' (Abadir et al., 2019). Agile business analysis has a method that allows team members to engage in proper dialogue and collaboration regularly, as opposed to the previous once-off communication at the end of analysis delivery.

Additionally, one of the benefits of transitioning into an agile business analysis approach is improved productivity and delivering value quickly. This is important because teams must focus on the specific functionality needed. The decision-making and impediment-removal process will be significantly improved, resulting in improved productivity and turnaround time. The agile business analysis approach helps enhance productivity and service quality (Sandstø

& Reme-Ness, 2021). The teams can also quickly assess and make changes to unblock business value, which was challenging using the traditional business analysis methodology.

Transitioning to agile business analysis helps remove the barrier between IT and business units. Subsequently, constant engagements exist, which fortify the quality of business analysis delivery. The benefits of the increased collaboration between IT and business are reflected in the Agile Manifesto. The most prevalent of the benefits is the value of customer collaboration over contract negotiation and constant customer interaction with the system at every phase of the development lifecycle (Smith & McKeen, 2011).

Also, in transitioning from traditional business analysis to an agile business analysis approach, there is an improvement in the management of processes and activities. For example, the management team will become more inclusive in the activities of the business analysis teams. This prompts positive responses from many of the actors. Effective agile business analysis leadership within teams helps to broaden the teams' ability (Agile et al., 2017).

Transitioning into agile business analysis has improved team dynamics and interpersonal relationships. This reflects across the functions of the teams from the perspectives of enhanced quality and productivity. This is indicative of team members working as a cohesive unit. The Agile Business Consortium (2017) provides a guide for such an approach in its agile leadership pillars.

Finally, two factors must be achieved if an organisation transitioning into agile business analysis is to be considered successful. Firstly, a proper performance metrics measurement must be adopted. This is to ensure agile business analysis successes. Secondly, the focus must be on the requirements backlog, the sprint backlog, user stories, daily scrum, value delivered, and development lead time (Moreira, 2013).

Contribution: The finding contributes to the business analysis body of knowledge (BABOK) by discovering South African organisations' major business analysis challenges. These challenges are the quality of business analysis, business requirements documentation, requirements elicitation processes, the cohesiveness of the business analysis team, increased dependency on the business analysis team, and improved quality of productivity. These challenges can be addressed by using agile business analysis in the context of South African organisations.

7.3. Challenging Factors Influence and Manifestation in Transitioning

Research question answered: How do the challenging factors influence and manifest in transitioning from traditional business analysis to agile business analysis practice?

Interpretation: Various challenging factors influencing the transition into agile business analysis were identified during the data analysis. These challenges were manifested within the organisations used as cases in the study.

Discussion: The challenging factors that influence transitioning into an agile business analysis approach are revealed in the two cases. The challenging factors are practices, tools, networks, requirements sources, and data types, as shown in Figure 7.1 below.

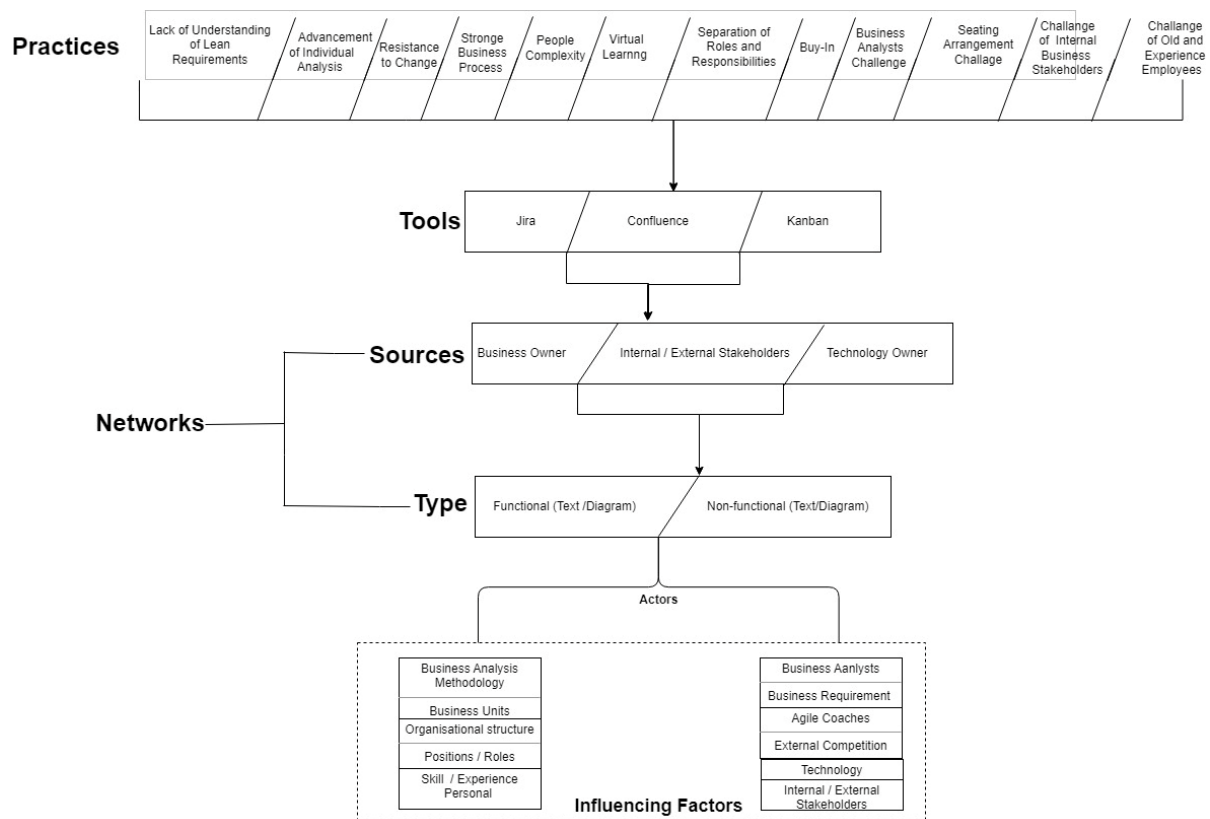


Figure 7.1: Factors Influencing the Transitioning to Agile Business Analysis

7.3.1. Practices

Common to the agile business analysis approach is an emphasis on collaboration, communication, and the human aspect of business analysis. Agile business analysis is based on key principles and practices that assist teams in working faster and better together and improving response time to satisfy customers' needs (Burga et al., 2022). In transitioning from

traditional business analysis to an agile business analysis approach, agile business analysis keeps organisations competitive and relevant in the marketplace (Burga et al., 2022).

The method allows for continuous improvement, higher-quality productivity, and growth. The study revealed that sprint retrospection helps an organisation to empower team learning. Also, individuals within teams benefit from the process by understanding better how to work together to improve efficiency and effectiveness.

The study revealed that scrum meetings are essential practices. They contributed to addressing most of the challenges that manifested within NEB and SWB. During the meetings, project status was reported to the SM. In NEB and SWB, there were constant changes, evolution, and updating of product backlog based on business requirements, needs and priorities, which were challenges that manifested from actors' activities. In the process, the challenges needed to be addressed.

The organisations, NEB and SWB, were experiencing pressure to deliver requirements in the two-week sprint. This was a challenging factor because the organisations were not used to providing requirements quickly. Moreover, the flexibility to adapt to change was challenging within NEB and SWB. Also, user stories and lean documentation creation were other challenging manifestations within NEB and SWB.

Primarily, this was because user stories mainly captured the functional requirements and excluded many activities. For example, the interaction between the end-user and the actual system and non-functional requirements such as performance, usability, tolerance, access, and security were not parts of user stories. This was challenging as the organisations needed to find an alternative method for addressing non-functional requirements documentation. Lean requirements documentation was important in transitioning into an agile business analysis approach. This is attributed to the fact that the lean documentation approach does not include many details. The approach relies on collaboration with the business stakeholders or end-users. From another standpoint, there was the claim that the lean approach was time-consuming. However, in NEB and SWB, requirements were completed upfront.

The sprint backlog was another important, challenging manifestation during the transition from traditional business analysis to business analysis. In NEB and SWB, the sprint backlog contains a list of completed user stories ready for development. The development team selects items they wish to develop for both organisations' sprints. Thus, the flexibility of the sprint backlog was a positive contribution to the development team. The practice of sprint planning meetings was a challenging factor that manifested itself within NEB and SWB. Also, the teams

were expected to describe their objectives for each sprint. This includes how the teams intended to achieve objectives. Some members of the team did not receive the practice well. They claimed to be micro-managed. The team also maintained that sprint planning meetings were time-consuming. This led to frustration and a lack of engagement within the team.

7.3.2. Tools

Various tools can be used to transition from traditional business analysis to agile business analysis. NEB and SWB selected three tools, Jira, Confluence, and Kanban, to be used in the process. Each tool can add value to the activities of agile business analysis but for different purposes and perspectives. Therefore, there should be certain criteria for choosing the suitability of the tools. The choice of the selected tools should be determined by an organisation's requirements for transitioning into an agile business analysis system. An organisation can select the appropriate tool for its objectives based on the requirements. Thus, if an unsuitable tool is selected, the organisation will probably encounter challenges when transitioning into an agile business analysis approach. This could lead to an unsuccessful transition from traditional to agile business analysis.

7.3.3. Networks

As revealed in the study, there were groups responsible for the source of requirements and the types of data that exist in the organisations, NEB and SWB. The proposed framework (see Figure 7.1 above) shows that the two groups are networks.

7.3.4. Requirement Sources

The requirement sources within NEB and SWB are a part of the different networks in the organisations. In the context of ANT, networks constitute a group of actors who have developed an alliance based on aligning their interests (Borgatti & Halgin, 2011). From an agile business analysis perspective, each source of requirements constitutes actors with similar interests. The requirement sources that manifest in the organisation as in the framework include internal/external stakeholders, business owners and technology owners. Each of these sources of requirements is a group of interested actors with the objectives of improving business analysis quality and productivity. For instance, stakeholders and requirements are used to analyse the system functionality. Business and technology owners' decisions are based on the stakeholders' needs.

7.3.5. Types Of Data

There are also different types of requirements being gathered within the organisations. From ANT's perspective, requirements can be categorised as actors. This is because in ANT, an actor is anything that has the potential to make a difference, and actors of similar interests intentionally or unintentionally develop a network (Callon, 1984). Hence, a set of requirements forms a portion of a network. In the study context, the existing networks are functional (text/diagram) and non-functional (text/diagram) requirements. Other actors of each network include the business analyst (elicits, analyses, and formulates use stories) of the requirements, providers (Product owners) of the requirements, Developer (code) the requirements, IT/IS specialist (support and enabler) of the requirements, and those that make use of the systems (end-users).

The interest of the actors emanates from their participation in different positions, such as:

- Attending agile business analysis and scaled agile framework (SAFe) training,
- Collaborating and communicating with agile BAs and agile coaches,
- The use of various practices and tools, and
- Utilisation of IT systems that store information, retrieve, and manage requirements.

7.4. Influencing Factors

The challenges that influence organisations' transition to agile business analysis are revealed from the NEB and SWB cases, as illustrated in Figure 7.1 above. As shown from the analysis, many factors are prevalent in both organisations that participated in the study, which assisted in case generalisation. A generalisation is an act of reasoning that entails drawing a broad interpretation from a specific scenario that makes assumptions about the unseen based on the seen (Polit & Beck, 2010). Human and non-human actors influence factors in transitioning into agile business analysis because both can change the situation, which aligns with Teles and Joia's description of actors.

BAs are limited in gathering, analysing, and documenting requirements to recommend a business solution. As revealed from this study, many BAs continue to employ the traditional business analysis approach, which requires vast documentation. Also, the traditional business analysis methods are tedious, time-consuming, and inefficient. Therefore, the continuous use of the traditional business analysis approach indicates that some South African organisations risk not conducting quality business analysis as these factors influence business analysis practices. This may have dreadful outcomes on an organisation's operations and affect its profitability.

The presence of these challenges has bad and good implications. They hamper an agile business analysis approach in the organisations (NEB and SWB). This can be attributed to the fact that they have not understood its benefits and potential. However, recognising these influencing factors, organisations could be driven towards transitioning from traditional business analysis to an agile business analysis approach. As illustrated in Figure 7.1 above, by recognising these influencing factors, organisations could potentially benefit from transition in three ways, namely:

- Providing details of functional and non-functional requirements,
- Reshaping their sources of requirements, and
- Choosing the most appropriate tools for their organisation.

Considering these influencing factors, organisations can identify the business requirements to implement proper business solutions and help put them into perspective. Thus, an organisation could categorise the requirements towards functional and non-functional priorities. Moreover, there is no need to neglect the non-value-adding requirements because they can still play a role in the system development and improve the business analysis standard. Also, organisations will be able to shape their requirements sources. Organisations can track the origin or source through knowledge of the requirements. This would assist with having acceptable references for the sources when performing business analysis activities, resulting in requirements analysis. Understanding the requirement types and sources would advise organisations on the most suitable tool. The decision would be justified as they would know the requirements to be gathered and where they would originate from. This helps compile requirements and clarifies the challenging factors influencing the transition from traditional to agile business analysis.

Contribution: Before transitioning to the agile business analysis approach, it is important to anticipate the common challenging factors that influence the transitioning process and what tools and practices are needed to address them. This means that requirements network, requirements sources and types must be understood. Also, actors' influence on 'transitioning from traditional to agile business analysis' should be recognised and known.

7.5. Summary

When transitioning to an agile business analysis approach, the stakeholders need to have a similar understanding of the challenges being experienced. Also, it helps involve all stakeholders to find a suitable solution to the challenges.

In transitioning to an agile business analysis approach, the importance of external agile business analysis coaches should be considered, as this would help address subjective reasoning that brings about challenges, for employees. As a result of the lack of a framework that uniquely focuses on transitioning from traditional business analysis to an agile business analysis approach, many South African-based organisations encounter various challenges during and after transitioning processes.

Finally, an organisation does not always transition to a business analysis approach exactly as advised but may pick features that would help them address their challenges. Eventually, organisations realise more benefits than anticipated from transitioning to an agile business analysis approach.

The following chapter presents the conclusion and recommendations of this study.

CHAPTER EIGHT

Research Limitations, Conclusion and Recommendations for Future Research

8.1. Introduction

This Chapter presents the summary of the research project. The chapter is divided into seven main sections. This first section shows the approach applied in the study. The second section is a summary of the research findings. The third section presents future research considerations. The fourth section discusses the study's contributions to the IS field. The limitations of the study are explained in the fifth section. Finally, the conclusion of the chapter is drawn in the sixth section.

8.2. The Approach of the Research

The research focuses on transitioning from traditional to agile methods of business analysis. The interpretive approach was followed based on the study's objective, as presented in Chapter One. As discussed in Chapter Four, the case study approach was employed because it offers an opportunity to study phenomena in their natural settings. Two South African-based organisations were selected and used as cases in the research. Transitioning from traditional to agile analysis entails understanding the relationships between stakeholders in an organisation's IT and business units. Also, it was crucial to understand better how activities or processes transform from one stage (or moment) to another. Considering these two factors, the ANT was deemed most suitable for the data analysis.

Hence, the ANT theory was applied as a lens. One of ANT's strengths is that it focuses on following the actors (Callon, 1986), which is necessary to understand individual roles and the processes they apply. Also, ANT traces the formulation of relationships between stakeholders (human actors) during the transition from traditional business analysis to an agile business analysis approach. This means that the purpose of employing the ANT as a lens was to logically explore the complex relationships between stakeholders in the context of a scientific study (Williams-Jones & Graham, 2003). It also offered a complete method for tracing the alignments of stakeholder's interests (Mähring et al., 2004).

8.3. Summary of Research Findings

For many years, the challenges confronting transitioning from traditional to agile analysis received limited attention. This could be attributed to either of two factors: limited empirical evidence or many key actors or organisations not understanding the depth of the challenges.

South African organisations must understand the challenges and benefits of 'transitioning from traditional to agile business analysis'.

One of the findings uncovered by the study from the cases NEB and SWB used in the study is that transitioning to an agile business analysis approach by South African organisations is driven by the current challenges experienced within their IT departments. The increasing reliance on IT solutions makes the challenges critical. In the organisations used as cases in this study, the IT departments were constantly under pressure to improve the quality of business analysis performance. Also, there were rapid changes in the market environment, which put more pressure on the IT departments to respond to the challenges as quickly as possible. In the case of NEB and SWB, agile business analysis reduced those challenges.

In the South African context, there seems to be a shortage of frameworks that can be used to understand the challenges and benefits associated with the transition from traditional business analysis to an agile business analysis approach. Consequently, that meant that South African organisations transitioning to an agile business analysis approach had limited access to case references, contributing to the unstructured nature of some environments. This is attributed to the cases of NEB and SWB, which revealed that South African organisations' transitioning to an agile business analysis approach went through three main stages. These are (1) pre-transitioning, (2) transitioning, and (3) post-transitioning stages. These stages need to be carefully managed to make the transition a success.

Despite the stages, organisations experience challenges transitioning from traditional business analysis to an agile business analysis approach. The study revealed that many challenges involve people and the organisational culture. The findings are that South African organisations must carefully manage the transition to an agile business analysis approach. It is crucial to obtain stakeholders' buy-in to transition into an agile business analysis approach successfully.

Apart from the challenges, the study found some benefits associated with 'transitioning from traditional to agile business analysis'. The researcher discovered that agile business analysis empowered the business analysis team to autonomously make decisions about the requirements and priorities that were self-organised. That required greater transparency and visibility of the end-to-end development lifecycle within and across functional teams, as they then had the autonomy to collaborate and interact. Also, the study revealed that the speed and quality of business analysis significantly improved with better cooperation, communication, and collaboration between IT and business. Additionally, the study found that

one of the benefits of transitioning to agile business analysis was improved management practices, which reflected improved team dynamics and overall organisational culture.

Another critical finding was that South African organisations often did not transition to the agile business analysis approach as advised. Instead, they selected some features of the agile business analysis approach that would deal with the challenges their organisations were experiencing.

8.4. Research Contributions

This section presents the study contributions from two perspectives: theoretical and practical.

8.4.1. The Theoretical Contribution

Theoretically, the study contributes to the body of knowledge viewed from academic and business perspectives. The two main areas of contribution are the use of ANT and terms of reference.

Without ANT, it would have been difficult to explore and understand the relationship between the actors and how various activities transformed from one stage to another in transitioning from the traditional to an agile approach within South African organisations (Alcouffe et al., 2008; Heeks & Stanforth, 2015). Also, the theory enabled an understanding of the various networks and how they came into existence (Callon, 1984; Law, 1999). Hardly any theory focuses on the formulation of networks the way ANT does (Iyamu, 2018b). Through ANT, the multiple challenges, and benefits of transitioning from traditional business analysis to agile business analysis were revealed using the four translation moments as a lens through which to view them. As a result, the factors that influence and manifest in the transition to agile business analysis in South African organisations were revealed.

The study helps organisations address some of the challenges they are experiencing in the rapidly changing business environment from an IT/IS research perspective. Therefore, the study contributes to existing IT/IS literature. In theory, the study benefits South African organisations, particularly financial services organisations, because the financial organisations used are empirical evidence. Thus, other organisations in different sectors with similar challenges can benefit from it. This is especially true regarding having an appropriate understanding of the critical influencing factors in the selection and implementation of the transition from traditional business analysis to agile business analysis.

From an academic standpoint, the study adds to the existing literature on ANT and business analysis. Although ANT has been applied in many studies, it is rare to find its use in similar areas of study. Thus, this study contributes to advancing the use of the theory from an IS context.

8.4.2. Practical Contribution

Practically, the study contributes to policy and strategy perspectives. The contributions can be of interest to organisations.

From a practical perspective, the findings from the study can be used to develop a policy for transitioning from a traditional into an agile approach in an organisation. The policy will be determined or influenced by the study's comprehensive insights into root causes. The insights help to identify the influences of the challenges and benefits in developing the policy. The policy helps to guide top management in the areas of leverage and potential while transitioning pitfalls to avoid. For example, the study highlighted resistance as a critical challenge to the success of transitioning from traditional business analysis to agile business analysis (Dikert et al., 2016). Thus demonstrating the benefits of an agile business analysis approach clearly and consistently to management across various organisations.

The other practical contribution of the study is that it can be used to guide the development and implementation of strategies for transitioning projects (Jovanović et al., 2020). The findings from the study can guide policy and strategy development on the implementation of agile business analysis in an organisation. In the six ways: (1) Issue Identification – issues relating to traditional business analysis needs to be identify through requirements analysis and documentation, (2) agile business analysis policy context – determine the context in which agile business policy should be developed, (3) Consultation – determine who should own the agile business analysis policy, (4) Implementation – allocate resources to support the implementation of agile business analysis within the organisation, (6) promotion and communication - communicate and promote adoption of agile business analysis within the organisation.

Based on the findings, strategies can be developed to guide an organisation's transitioning activities and processes (Rohunen et al., 2010). Processes are executed through translation and influenced by human actions (Law, 1999). For example, the study revealed that the relationship between business and IT is critical for the success of the transitioning process,

primarily because it entails collaboration and trust among team members. The strategies can define and provide an interpretation of cooperation and management of trust.

8.5. Limitations of the Study

The study is limited in three ways: scope and focus.

The scope of the study is limited to financial organisations, which were used as cases in the research. Thus, other sectors were excluded from selecting organisations for the study. From a focus perspective, the study aimed to understand the transition from traditional to agile business analysis. This does not include examining how factors influence the processes and activities involved in an organisation's transition.

The study was new on the subject matter, exploring and describing participants' lived experiences in the transition from traditional business analysis to an agile business analysis approach. Consequently, tracing all actors and understanding their interests was difficult, hence the small population samples. These limitations do not, however, render the study invalid. Instead, they reinforce them because two cases were studied in detail and analysed.

In ANT, the concept of power is important, however, from a focus perspective, the concept of power was not developed beyond what was required for the study to achieve its objectives.

The study was comprehensive based on the following reasons: (1) the most appropriate methods, approaches, and techniques were selected; (2) rich data was collected from two organisations; (3) the analysis of the data was thorough; and (4) the results are well presented. However, the research study has some limitations. The main limitation was the restriction from accessing confidential documents of the participating organisations. However, this limitation did not adversely affect the study's findings as it was mitigated by the efficient use of supporting data collection methods.

The research was conducted using banking organisations based in Johannesburg, South Africa. This was due to limitations such as the researcher being also based in Johannesburg and their inability to reach other geographical locations.

8.5.1. Consideration for Future Research

Although the research covered its focus, some areas could still be considered for future study. Two areas that may be of significant interest to academics and business are measurement and culture. Another vital area that could be of interest is to conduct a similar study and apply

different theories, such as diffusion of innovation or activity theory, as a lens through which to view phenomena.

Firstly, it is essential to conduct research that proposes a model or framework for measuring the success of transitioning from traditional business analysis to agile business analysis in an organisation. This will help the organisation to understand their return on investment (ROI), which could then be used to determine success or failure.

Secondly, a study could be conducted to establish the role organisational culture plays in the success or failure of transitioning from traditional business analysis to agile business analysis in the context of South African organisations. The study could reveal how the organisational culture influences processes and activities. Thus, findings from such a study could be used to guide the development of policies for transitioning purposes. The policy could then be used to reduce challenges and fortify success.

The researcher encourages future researchers to conduct similar research studies using two or more organisations, primarily because the researcher believes such a study would reinforce the generalisation of this study's findings. This would also provide an opportunity to correlate the findings.

A further study could examine the most appropriate organisational culture for a successful transition to agile business analysis in South Africa. Research could also be conducted to establish environmental conditions that would cause organisations to progress from agile business analysis to traditional business analysis methodology in the context of South African organisations. Furthermore, a future study could be undertaken to examine the possibility of a framework that can facilitate ease of transitioning into an agile business analysis approach, in the context of South Africa.

8.6. Conclusion

This chapter presents the conclusion of the study. The chapter summarises the approaches and methods employed in the study. The findings of the study are also summarised. The findings' summaries help justify the suitability of the techniques and strategies. Very significantly, it assists with the credibility of the research, which can fortify interest in the findings.

The study lays the ground foundation for extending the phenomenon studied. The chapter presents further research areas that can be developed into the research stream. Significantly, the areas of further research cover both business and academic domains. Additionally, the

contributions of the study are discussed in the chapter. It explains how the study contributes to business processes and educational activities. The areas of limitations are also highlighted.

The study identifies the challenges and benefits of 'transitioning from traditional to agile business analysis'. It explains how the associated challenges and benefits influence processes and activities in transitioning into an agile business analysis approach. This study highlights that successfully transitioning from traditional business analysis to agile business requires knowledge and understanding of characteristics within the agile business analysis approach.

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APPENDICES

APPENDIX A: Ethics Approval Letter



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UCT Commerce Faculty Office

We are pleased to inform you that your ethics application has been approved. Unless otherwise specified, this ethical clearance is valid until _____.

Your clearance may be renewed upon application.

Please be aware that you need to notify the Ethics Committee immediately should any aspect of your study regarding the engagement with participants, as approved in this application, change. This may include changes to the research design, questionnaires, or choice of participants.

The ongoing ethical conduct throughout the study remains the principal investigator's responsibility.

We wish you well in your research.

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APPENDIX B: Participant Consent Form



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15 December 2022

Request to conduct research and interview participation consent form.

Dear Sir/Madam,

In terms of the requirements for completing a master's degree in information systems at the University of Cape Town, a research study is required.

The researcher, in this case, Augustine Iyamu, has chosen to conduct a case study entitled "**Understanding Transitioning from Traditional Business Analysis to Agile Business Analysis: The Case of South African Banks**". The research aims to explain South African banks' challenges 'transitioning from traditional to agile business analysis'.

Your participation in this research is voluntary. All information will be treated confidentially and used exclusively for this study. No individual names will be recorded or published. You will not be requested to supply any identifiable information, ensuring the anonymity of your responses. You can withdraw from the research at any time for whatever reason, per ethical research requirements.

The data collection method will be one-on-one interviews with a small group of the staff responsible for business analysis. The interviews will be conveniently conducted at your organisation's premises and last 50-60 minutes. If you are willing to participate in this study, kindly sign the attached form and return it to me at your earliest convenience.

Should you have any questions regarding this research, please feel free to contact me on 067 1525 720 or email: IYMAUG001@myuct.ac.za.

Participation in this study would be greatly appreciated, but it is voluntary.

Sincerely

Augustine Iyamu

Researcher \ M.Com Student, (UCT)
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"Our Mission is to be an outstanding teaching and research university, educating for life and addressing the challenges facing our society."

Research Participant Consent Form

I, _____, consent to participate in the research on Understanding Transitioning from Traditional Business Analysis to Agile Business Analysis: The Case of South African Banks.

I am aware that participation is voluntary and that I may choose to withdraw from this study at any time should I choose to do so.

Signature

Date

APPENDIX C: Case Study Protocol

Guideline

- **Case Study Overview**

- **Purpose**

To understand and explain the challenges organisations face when transitioning from traditional business analysis to an agile business analysis approach.

- **Study objectives**

From the research problem, the following objectives are articulated:

- To understand the challenges associated with transitioning from traditional business analysis to agile business analysis practice.
- To understand how the challenging factors influence and manifest in transitioning from traditional business analysis to agile business analysis practice.

- **Conceptual framework: The Actor Network Theory**

The ANT is a theoretical framework and a logical approach to studying technological achievements by ranking human and non-human elements equally (Callon, 1990). In addition, ANT is concerned with the interactions between the actors who work together to attain specific objectives and form an actor network in the process (Law et al., 2012)

- **Unit of Analysis**

- Business Analysts
- Scrum Masters
- IT Professional
- Agile Professional

- **Sampling:**

- The Actor Network Theory
 - Organisations that follow agile principles and practices
 - Organisations with dedicated business analysts' roles
 - Organisations with dedicated scrum masters roles
 - Organisations with dedicated product owner roles
 - Organisations with dedicated developers and other IT professionals
 - Organisations that operate in a rapidly changing/dynamic environment

- **Data Collection Procedures**
 - Participant Details
 - Participants names
 - Roles of participants within the organisation
 - Participants' contact details
 - **Data collection plan**
 - Expected Evidence
 - Semi-structured, one-on-one interviews (scrum master, senior business analysts, senior manager business analyst, specialist business analyst, solution manager, solution strategist developers, product owners, and other team members).
 - Documents (request additional documentation from the participants).
- **Preparation before the one-on-one Interviews**
 - Obtain a signed letter of consent from the study supervisor.
 - Print out / email consent forms to the participants.
 - Send meeting invites to participants.
 - Provide participants with the study purpose.
 - Review the organisation's policies (organisations' websites).
- **To-do List**
 - Obtain signed consent from the participants.
 - Inform the participants again about the research objectives, ethics, and confidentiality.
 -
- **Data Collection Questions**
 - Appendix D: Research Questionnaire.

APPENDIX D: Research Questionnaire

No.	Interview Questionnaire
1.	Please tell me a little bit about yourself.
2.	How long have you been in this organisation?
3.	What does your role currently entail?
4.	How would you describe your current operating business environment?
5.	How long have you been practising business analysis?
6.	From a business analyst perspective, how would you describe your current operating business environment?
7.	How would you describe agile business analysis?
8.	Has your organisation fully transitioned from traditional business analysis to agile business analysis?
9.	How long did it take your organisation to transition from traditional to agile business analysis?
10.	What was your specific role in the transitioning journey?
11.	Can you describe the transitioning journey from traditional to agile business analysis?
12.	As a business analyst, are you required to upskill yourself during the transitioning journey?
13.	During the transition journey, what type of training or upskilling was provided by your organisation?
14.	How was the transition process managed?
15.	How was the transition from traditional business analysis to agile business analysis funded?
16.	In your view, what informs the decision to transition from traditional to agile business analysis?
17.	Can you describe the impact of agile business analysis in your current environment?
18.	Can you please describe the kind of challenges faced during the transitioning journey?
19.	How should organisations address these challenges?
20.	Currently, which business analysis methodologies are you practising?
21.	In your view, what are the benefits of transitioning to agile business analysis?
22.	How would you describe the changes brought about by agile business analysis? Positive or negative changes.