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Original Article

Resource Dependency Framework for Digital Transformation in South African Financial Service Providers

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Abstract *- This paper addresses resource dependency within South African Financial Service Providers (FSP) with a focus on two contexts, namely the FSP context and the South African context. The paper uses the resource dependency model and the Technological, organizational and environmental theory as lenses to deeply understand what and how South African Financial Service Providers experience the digital transformation. The problem is that resource dependency is normally discussed in general, not specific to the context. Following an interpretative philosophy and inductive approach, this paper shows that digital transformation within FSP in South Africa is either enabled or inhibited by existing resource dependency. The paper argues that resource dependency ought to manifest cognizant of the FSP's technological, organizational and environmental contexts. The resource dependency digital transformation framework conceptualised unpacks the theoretical, practical, and contextual contributions of this paper.*

Keywords *- Digital Business, Digital Transformation, Financial Service Providers, Insourcing and Outsourcing, Resource Dependency, South Africa, Supplier Competency, TOE Context.*

I. INTRODUCTION

South African Financial Service Providers (FSPs) are characterised by turbulences and uncertainties that continuously affect business operations. Many writers summarize the current era of business as an adapt or die era for many businesses, notably financial service providers. The way FSP businesses operate has changed dramatically, and there is now a new economy on the rise known as a digital economy which requires Financial Service Providers to re-look at how they operate as a business. Financial Service Providers must leverage new technologies in order to remain relevant in the current times of banking. This paper address resource dependency within South African Financial Service Provider. The digital transformation phenomenon is not well understood, especially in the context of South Africa and Financial Service Providers. The problem is that resource dependency talks of digital transformation in general not sensitive to context. The South African context and Financial Service Provider context will make a difference in how digital transformation should be implemented due to uniqueness.

Ones and zeros are eating up new and existing businesses through digitisation. Various enterprises around the world, including financial service providers, are striving for digital transformation - turning digitisation into activities, processes and transactions. The digitisation concept has been popular for both corporate, governments as well as academic press (Holland and Naude, 2004). Digitalisation has become a lifestyle that impacts businesses and individuals; this has changed the way individuals' shop, bank, study, travel and other aspects of an individual's life. The digital disruption is due to the creation of new emerging technologies like social platforms, mobile internet, machine learning, to name just a few (Fitzgerald et al., 2014).

A. South African Context

This paper acknowledges that South Africa is unique and globally categorized as a developing country. To this point, what works in other countries, notably, i.e. developed countries, does not necessarily work as expected in South Africa. For example, a number of South African communities live in rural areas with limited technological accessibility. Notwithstanding, access to FSP services is enhanced via digital technology. There have been many developments in establishing digital transformation over the past two decades in the Western World. Within developing countries, particularly South Africa, this has been even more of a challenge as these countries have had compounding issues in establishing digital transformation as a result of steady economic growth, technology, infrastructure, language, cultural diversity and political backdrops. These additional

complexities have stifled digital transformation in a broader and more complex manner. Therefore, these unique challenges that South African FSP's have require tailor-made solutions due to context, not one size fit all kind of approach.

B. Financial Service Providers

South African Investor's Handbook (2014/15) outlines business industry sectors in the country. The following is a description of the financial services industry.

The South African banking industry is primarily governed by The Banks Act 94 of 1990, which seeks; To provide for the regulation and supervision of the business of public companies taking deposits from the public, and to provide for matters connected therewith.

Banking systems play a pivotal role in modern economies around the world, and this is the same for South Africa (SA). The SA banking industry is made up of 17 registered banks, 15 local branches of foreign banks, 3 mutual banks, 2 cooperative banks and 36 representative offices. The industry controls R4 877 billion (ZAR) in total assets. Of which the five dominant banks account for 90.7% (which has seen an increase from 2015 to 2016) of the total assets in the industry, international banks 5.8% and 3.5% is spread across the remaining players. In 2016 the South African Reserve Banks (SARB) had issued three new entrants authorisation to trade, namely, Tyme Capital (Pty) Limited, Discovery Limited and Postbank Limited (SARB, 2016).

The financial services industry in South Africa boasts dozens of national and foreign organizations offering a complete variety of services, including commercial, retail and merchant banking, mortgage loans, insurance and investment. South Africa's banking system, comprising a Reserve Bank, some big financially powerful banks or investing organizations, and a number of smaller banks, is well developed and efficiently controlled. Competition is in investment and commercial banking. The banking sector of the country compares favourably with that of the industrialized countries. Throughout the previous decade, South Africa's financial service industry has been operated by numerous international banks and investment organizations.

Financial services are those economic services offered by the financial services providers are depicted in table 1 as follows:

Table 1. Economic services offered by the financial service providers

Economic Services	• Credit unions • Banks • Credit-card firms • Insurance companies • Accounting companies • Consumer lending companies • Securities brokerages • Investment funds • Corporate managers • Government-funded enterprises

Additionally, the financial services sector includes a wide variety of financial management companies such as banks, investment companies, insurance companies, and real estate firms.

C. What is Digital Transformation:

Digital transformation involves, but is not limited to, conversion of business operations, products, processes. Organizational structures need to be developed by companies in order to manage their complex transformations (Matt et al., 2015). Additionally, individuals are impacted by digital transformation due to fast and radical change in digital technologies, which impacts their lives as well as markets (Ebert and Duarte, 2016). The speed at which technologies are developed puts various enterprises as well as government agencies under pressure to go digital before it is too late, as they seek to survive and maintain their competitive advantage (Westerman et al., 2011).

D. Digitisation, Digitalisation and Digital Transformation

Before we delve into the subject of digital transformation, it is necessary to first clarify the difference between digitisation and digitalisation. These two terms are often wrongfully used interchangeably, but their difference is crucial to the understanding of Industry 4.0 (McMorrow 2018) and, of course, digital transformation.

a) Digitisation

Osman (2018) defines digitisation as the process of taking analogue information and encoding it so that it can be stored and transmitted via a computer.

b) Digitalisation

According to Rachinger (2019), digitization is the process of converting analogue into digital data sets, which forms a framework for digitalization. Gartner (2020) defines digitalization as the use of digital technologies to change a business model and provide new revenue and value-producing opportunities; it is the process of moving to a digital business. Also, Ryynanen and Hyyrylainen (2018) asserted that digitalisation is the steadily increasing utilisation of digital technologies in the everyday lives of people. In light of this, digitisation refers to the conversion of items, whilst digitalisation is related to how things are delivered and processed (Osman 2018).

c) Digital Transformation

Consequently, digital transformation is the use of new digital technologies such as big data analytics, machine learning, social and so on, in order to enable major business improvements like enhancing customer experience, streamlining operations or creating new business models (Fitzgerald et al., 2014). In light of this, digital transformation goes beyond digitalisation

and results in value and revenues being created from digital assets (McDonald and Roswell- Jones 2012).

Reis et al. (2018) in their study show that digital transformation definitions can be categorised into three separate groups; namely, technological (relates to new digital technologies such as social media, mobile, analytics or embedded devices), organisational (relates to changes of organisational processes or creation of new business models) and social (a phenomenon that influences all aspects of human life). In this regard, Ibid et al. (2018) defined digital transformation as the use of new digital technologies that enable major business improvements and influences all aspects of customers' life. The success of the digital transformation within an organisation depends on the process and operations management changes (Dremel et al., 2017); it is not a one-day event but a journey that takes a collaboration of different business units and resources.

The next section will look into a review and discussion of existing digital transformation frameworks that are relevant to this paper.

II. SURVEY OF SCHOLARSHIP

This section reviews the various existing digital business and digital transformation frameworks.

A. Digital Orchestra Framework

As a substitute for the Digital Piano Concept, the digital orchestra concept was proposed. This is the new structure replacing the original Digital Piano proposal to assess the integration of a digital business within the group. The framework has been published in the Report by IMD and Cisco Corporation's Global Centre for Digital Business Transformation (GCDBM). The foundation of the framework is that the leadership of a company must decide what kind of value it wants to create and evaluate the strategic options to achieve it. Through digital transformation, the structure includes ten areas that an organization should consider (Wade et al., 2017).

The area includes services, networks (go-to-market), clients, partners, workers (engagement), IT systems (operations), frameworks, rewards (organization). The framework covers the organizational structure and priorities in a significant way that provides a valuable tool for the Management of the reinvention of the organization through digitalisation. The four classes of operating models covering the ten things work in a way that makes it mandatory that they unite together seamlessly on the digital business transformation path of any company that wants to follow the system as its guide.

Fig. 1 Digital Orchestra Framework (GCDBM, 2015-2017*)*

B. Digital Transformation Framework

The Digital Transformation Framework is another framework that aims at understanding digital transformation processes in an organization, and the framework is developed by Matt et al. (2015). The framework has been premised on the idea that the organization's digital transformation would serve as a central concept incorporating all the organizational planning, priority and digitalisation implementation.

According to Ibid et al. (2015), digital transformation strategies should include four key areas: technology use, changes in value creation, structured modifications and financial considerations. At the very heart of this paradigm is the financial aspect, which is the primary driver and motivator, a novel method for providing a framework for understanding the complexities of a business enterprise's digital transformation, in that the focus of a company is on sustainable growth and benefit over the long term.

The framework provides a fundamental academic basis for understanding digitization through the description of four important building blocks for digital transformation. Ibid et al., 2015 suggest future research to define and concretize common elements that can be connected to four dimensions that form the foundation of the framework. It should be noted that, while this structure has been formulated and developed within the universities, it must still be checked or validated as a robust framework that can be applied to digitisation understanding. Therefore, the conceptual stage of development remains.

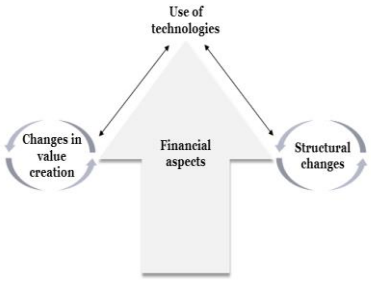

Fig. 2 Digital Transformation Framework (Matt et al., (2015).

C. Digital Reinvention Framework

The concept suggested by Berman et al. (2016) is based on the argument that organizations must pursue a new approach, build up new skills and develop new ways of working for a productive digital reinvention. Traditional companies must follow a fundamental bottom-up reinvention of strategy, service and technology for an effective digital reinvention (Ibid et al., 2016). They should, therefore, keep the overall focus on experience and not productivity.

The framework offers a way to achieve a digitally transformed organization through an experience-first approach based on digital drivers (digital innovations such as cloud technology, cognitive technology and research, internet, blockchains, Internet of Things, and more) (Ibid et al., 2016). The framework is built on a foundation of three core organizational priorities: the creation of a new focus, the development of new skills and new working methods. The primary drawback of the theory is that there is purely theoretical evidence to prove the argument without any empirical evidence.

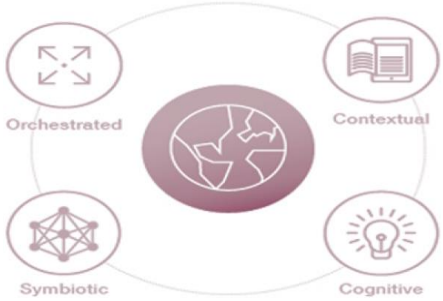

Fig. 3 Digital Reinvention Framework (Berman, S. J., et al., 2016).

D. Significance of digital transformation for an organisation

Digital transformation allows firms to expand, gain competitive advantage and venture into new markets by adapting to changes in market conditions which are critical to the survival of businesses (Lucas Jr and Goh, 2009). According to Karimi and Walter (2015), firms with dynamic digital transformation capabilities are well-positioned to outperform those firms without. These digital transformations can be driven by several factors, which include but are not limited to societal, consumerist and managerial changes in a globally interconnected and symbiotic economy (Kenneyet al., 2015). Digital transformation is emphasised further with the ever-increasing popularity of Big Data and machine learning as an important strategic tool that can be leveraged to automate and improve business processes (Huang et al., 2017). In this regard, many firms are pouring monies into activities that are related to digital transformation processes in a bid to stay relevant in this fast-growing digital era (Ross et al., 2016).

Organisations face a number of challenges in their efforts to implement digital transformation. These challenges emanate from the following factors: digital technology is continuously changing and developing (Nambisan et al., 2017), digital transformation needs a wholistic and integrated approach that affects multiple business units (Kohli and Johnson 2011), scarcity of knowledge on digital technology within the Management and digital transformation needs a combination and synergy of different skills and capabilities (Holotiuk and Beimborn 2017).

E. Role of leadership on digital transformation

The digital business transformation is expected to bring changes to the organisation by transforming the customer experience, operational processes and business models (Westerman et al., 2014). This digitisation process of an organisation will nearly affect all aspects of the business as the digital transformation will create new roles which require new skills and competencies along with new forms of leadership (Kohnke, 2017). In light of this, leaders must be in a position to direct the business toward profitable activities and in order to do so, the leaders must understand the implications of the digital transformation. The leadership role has evolved over the years, and it is no longer only an individualistic characteristic, but according to Larjovuori et al. (2018), Leadership is viewed as a dyadic, shared relational, strategic, global and complex social dynamic. In one way or the other, modern leadership theories emphasise the importance of social interaction and relational leadership practices (Ibid et al., 2018).

F. The digital transformation journeys

The digital business transformation is not just a walk in the park but a journey that requires a strategic and holistic approach. All relevant stakeholders also need to be involved in making the transformation as smooth as possible. Wade (2015) asserted that there are seven categories that must be changed for the digital transformation journey to be successful. These seven categories are the business model, organisational structure, people, processes, IT skills, products & services offered and engagement model. All title and author details must be in single-column format and must be centred.

G. Impediment for going digital

Khanchel (2019) asserts that organisations going through the process of digital transformation face four challenges which are the extent of digitization, the constant evolution of the digital world, the new aspect and the strong demand for collaboration and coordination. Firstly, the extent of the digitization challenge emanates from the fact that the digital function covers the whole organisation and the complexity of managing and regulating involves all the departments of the organisation. Secondly, the constant evolution of the digital world means the technologies are evolving at much faster rates, and therefore, the need for continuous learning and updating the technologies is essential. Thirdly, the new aspect refers to new functions within the organisation that are created as a result of innovative efforts, and managers are usually not sure how to locate them, and hence, a lot of collaboration

is required to know what is needed and how to do it well. Lastly, strong demand for collaboration and coordination is essential for digital transformation, which strains the traditional hierarchical coordination and collaboration practices (Ibid., 2019). This calls for new methods of communication and collaboration which can handle the digital function of the organisation, which consists of many elements that must be connected and synchronised to avoid falling into digital anarchy.

H. Digital disruption

Kane (2019) states, Digital disruption refers to the way digital technologies are upending entire industries, changing the rules of the game. Digital transformation is about how companies are adapting to the new reality created by digital disruption. This digital transformation does not only reinvent the organisation's vision and strategy, organisational structure, processes, capabilities and cultures but also markets and entire industries (Gurbaxani and Dunkle, 2019).

Digital transformation of an organisation rides on the people; without people, there is no digital transformation, and therefore, for the digital transformation to be successful, it depends on the people who are part of the transformation (Kane, 2019).

For digital transformation to be a success, the organisation must actively increase agility, encourage experiments and continual learning, recognise and reward collaboration, accept an appropriate level of risk of failure and increasingly organise around cross-functional teams (Kane, 2019).

III. THEORETICAL FRAMEWORKS UNDERPINNING THE PRESENT STUDY

A. Resource Dependency Model

Pfeffer and Salancik (2003) state that the success of an undertaking based on the theory of resource dependency is defined as an organisation looking to maximize its own strength, and the theory characterizes links between institutions, dependent on the trade of assets as just a set of power dynamics. In addition, (Pfeffer and Salancik, 2003) imply that companies often change their relationship dependence by simply maximizing their own dependence, which also tends to create an advantage; that is, creating a sense that they can depend on themselves and not wholly on other organizations.

The resource dependence theory argues that the goal of an organisation is to minimize its dependence on other organisations for the supply of scarce resources in its environment. Cuervo-Cazurra et al. (2019) state that the Resource dependency theory is concerned with actions firms can take to manage contextual dependencies and suggests that units are differentially valuable in dealing with challenges emanating from its external environment. This theory focuses on how important the resource is to the organisation and to what extent do other organisations control the resource. It was founded by Pfeffer and Salancik (1978), and it has evolved throughout the years. According to Cuervo-Cazurra. (2019), the resource dependency theory addresses the notion of power in organisational relationships; these power relationships determine who controls the scarce resources and to what extent.

Furthermore, an organisation can increase its power by minimising its dependence on other organisations and by doing so, an organisation can reduce the potential uncertainty that can be brought about by its interdependency with the external environments (Fraczkiewicz-Wronka and Szymaniec, 2012). In this regard, the extent of the control depends on whether the focal organisation is aware of the demands; the focal organisation obtains some resources from the social acting making the demands. The resource is the critical part of the focal organisation's operation, the social actor controls the allocation, access or use of the resource in which there is no alternative of the resource, and the focal organisation does not control the allocation, access or use of other resources critical to the social actor's operation and survival (Miner 2015). In order for an organisation to survive, it must operate as part of the coalitions that contribute resources and support; these coalitions are managed by the Management of the organisations to ensure continued support and sustainability of the organisation (*ibid*., 2015).

Basically, having the right resources gives enterprises power because through the power, they can create an advantage for them and ensure that they can use their power to partner with other enterprises - thus creating dependency for other enterprises. The theory was formulated to focus on the dependency between organizations. However, the dependencies could be created within the enterprise's own units or departments - for example, the business units depending on the IT unit to move their business forward.

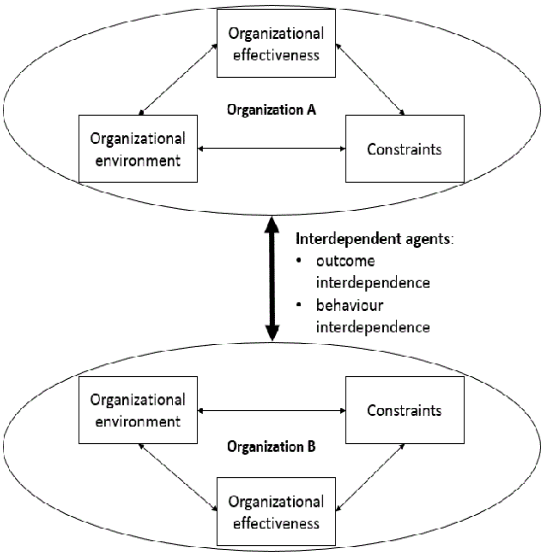

Fig. 4 Resource Dependency Theory (Pfeffer and Salancik, 1987)

B. Technology Organizational and Environmental Framework (TOE)

TOE is the widely applied framework within the information systems qualitative research area. Depietro et al. (1990) state that three pillars, the technological, organizational and environmental context, guide the procedure adopted by a company and applying technological innovations. The three pillars affect how a company sees the necessity of new technologies, searches and adopts them. In addition, the authors indicate that technology is typically composed of internally and externally relevant technologies.

Arpaci et al. (2012) assert that the TOE framework for organisational adoption was developed by Tornatzky and Fleischer (1990) based on the Contingency Theory of Organisations. The TOE theory emphasises that an effective organisation should have a structure that is consistent with its environmental needs, which influences the firm's adoption decision. The TOE framework, as outlined by Oliveira and Martins (2010), is described as follows;

- The technological context relates to technologies that are currently being used within the organisation as well as new ones that are relevant to the organisation.
- The organisational context relates to the characteristics and resources of the organisation that either constrain or promote the adoption process.
- The environmental context relates to the environment in which the organisation conducts its business which includes but is not limited to competitors, industry and government, which can motivate or create barriers to the adoption process.

Ven and Verelst (2011) contend that the TOE framework is a taxonomy for the classifying factors and, therefore, it does not describe all factors that influence the adoption process; consequently, the TOE framework is used in conjunction with other adoption models as it only encourages the researcher to take a broad view on the subject matter.

Moreover, things like enterprise equipment as well as processes are also taken into consideration within the technological context. On the other hand, scholars stress that the organizational context talks about the business features and facilities, including size, centralisation, level of formalization, management structure, human resources, slacks and connections between staff. Finally, the environmental context described by scholars considers the dimension and layout of the industry, competitiveness side of a company, macroeconomic background and regulatory settings.

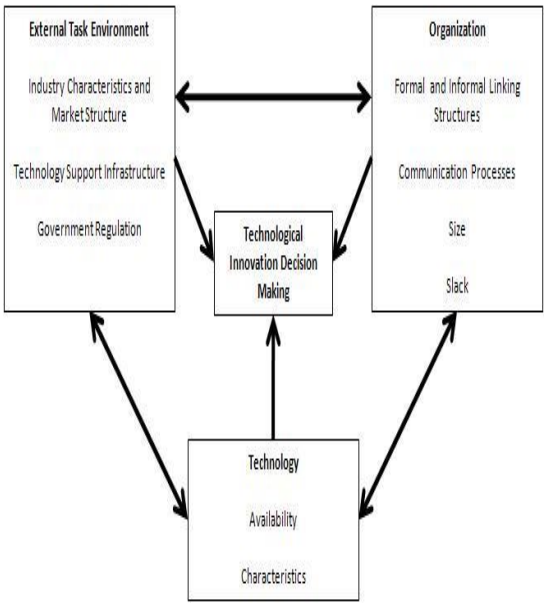

Fig. 5 Technology Organizational and Environmental Framework (Depietro, Wiarda et al., 1990)

IV. CONCEPTUAL RESEARCH FRAMEWORK

Conceptual Research Framework (CRF) basically gives a research work conducted a solid ground to base the study on existing and tested theories that are deemed fit to explore the study. Theories or models discussed in the previous section are key to formulating the conceptual research framework that supports the present study by harvesting from certain aspects of these theories.

Bickman and Rog (2008) state that conceptual framework statements are used to provide a preliminary philosophy of what the study is about and why this phenomenon takes place. A conceptual model is defined in the form of a graphic or worded business model, which explains the main things to be explored key factors, ideas or variables and the presumption of relationships between them, either graphically or in narrative form (Miles et al., 1994). Two theories were discussed, and the conceptual research framework is the interpretations extracted mainly from the Technology, Organization, and Environmental Framework (TOE), the IT Compatibility Model.

Figure 6, the Conceptual Research Framework for Digital Transformation for South African Financial Service Provider Context, in the next page, highlights extracted elements of the frameworks. Elements from these frameworks which suites this present study are described in table 2; theoretical frameworks are used as lenses, aid in the collecting of information.

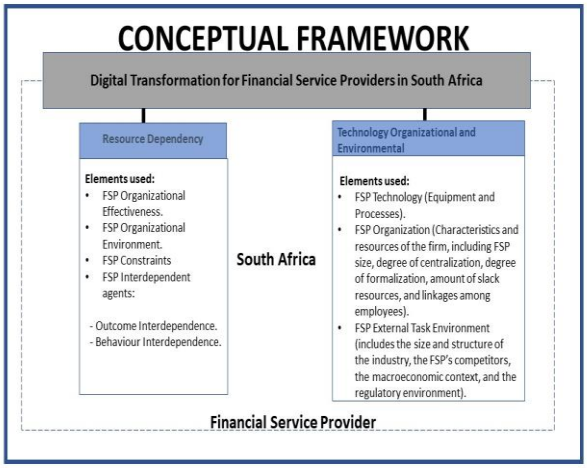

Fig. 6 Conceptual Research Framework for Digital Transformation for South African Financial Service Provider Context

Table 2 contextualizes the CRF elements. These elements inform the study objectives and questions.

Table 2. Elements of the CRF contextualized

Framework /Theory/Model	Descriptors
Resource Dependency Theory	• Organizations depend on resources; therefore, they will look at South African financial service providers organizational effectiveness and organizational environment. • South African financial service providers resources required to conduct business are thus often in the hand of other organizations, interdependent agents (outcome Interdependence and behaviour Interdependence) will be examined. • Resources constitute a power foundation; therefore, the study will look at resource's constraints South African financial service providers have at their disposal.
Technology Organizational and Environmental Theory (TOE)	• Identify the features of technology with regards to South African financial service providers; the company's readiness (equipment and internal processes) and the environment are the key technological drivers. • External task environment such as regulatory that has an impact on South African financial service providers.

The next section describes the methodology followed in this paper.

V. METHODOLOGY

A. Interpretivist Paradigm

Research approaches are designed to understand the world and experiences; according to Cohen and Manion (1994), this refers to the world of human experience, and actuality of the world is built according to social principles (Mertens 2014). According to Creswell and Creswell (2017), an interpretative or constructivist scientist uses the participants' views of the situation being studied and acknowledges the influence of their very own viewpoint and perspectives on the research.

The present study followed an interpretive paradigm to study digital transformation in South African financial service providers. The reason the interpretivism paradigm was followed is that the study sought to understand the current status quo regarding how financial service providers in South Africa conduct digital business from their subjective experiences. This paradigm employs methodologies focused on attaching meanings from interviews and observations of study participants based on their subjective experiences. Additionally, this paradigm allowed for both deductive and inductive research approaches, that is, catering for both qualitative and quantitative research approaches.

B. Inductive Reasoning

This is described as a concept that allows researchers to use what is already known to reduce the uncertainty about the way the world is (Creswell and Creswell 2017). This approach heavily relies on meanings derived from the mostly qualitative data collected. Although the study is underpinned by existing theories, it is still inductive rather than deductive. The elements from the theories were used as lenses to what themes should be studied and analyzed as opposed to testing and proving/disproving the theory constructs deductively. With the inductive approach, the idea is to attach meanings to the elements as brought out during the collection of data, interviews and observations.

The study goal in qualitative research is exploratory and descriptive instead of explanatory (Ferreira et al., 1988). The descriptive aspect of qualitative research helps the author to describe the study participants' ' experiences, which either helps or contradicts the conceptual premises on which the analysis is focused (Wodak and Meyer. 2009). The descriptive aspect of qualitative research helps readers to understand what the experience means, what the issue is and how it works (ibid., 2009).

The qualitative research approach was appropriate for this study as the purpose was to explore and describe the digital transformation process in its infancy stage with no known best practices for it, especially with regards to South African financial service providers. To this point, this study sought to formulate a framework that supports and informs digital transformation for South African financial service providers

C. Research Strategy

Yin (1991) describes case study research strategy as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used. Research case study strategy provides a comprehensive version of what happened, interactions, insights and methods in this specific case. In this study, a descriptive case study was considered.

A case study might be classified as either an extensive study of a human being, a group of people or an organization (Financial service providers, in this study). This is a case study of an organization that consists of multiple business units, which were treated as case units, falling under the financial sector industry. Gustafsson

(2017) classifies a case study as a systematic and intensive study of an individual, organization, society, or any other unit examining the depth of data. Case studies are the preferred strategy to examine a contemporary trend in its actual life and when working on a phenomenon that is in the early stages. This study applied a case study, a financial service provider with multiple case units. 8 case units were studied.

The pseudo name used for the FSP in this paper is Modiba Bank. Modiba Bank is a Financial Service Provider doing business in South Africa and within the African continent with some presence outside the African continent. This was a case study of Modiba Bank. Modiba Bank has a rich history in South Africa and started building a franchise in sub-Saharan Africa almost 30 years ago. The bank has an on-the-ground presence in 20 countries on the African continent and the solid local knowledge required to operate a successful business in Africa.

Modiba Bank is a diversified business that provides client solutions across the full range of banking and related products and services, namely:

- Transactional products.
- Mortgage lending.
- Card products.
- Vehicle and asset finance (VAF).
- Lending products.
- Client coverage.
- Global markets.
- Transactional products and services (TPS). Investment banking.
- Short-term and life insurance products.
- Financial planning and modelling.
- Integrated fiduciary services.
- Specialized banking, wealth management and advisory service solutions.
- Offshore financial services to African clients.
- Investment services, including global asset management.
- South African retail.
- Business development and Asset management.

D. Research Design:

This section describes how the study was conducted. It defines the unit of analysis, population, sampling and the data collection methods used.

a) Unit of Analysis:

Trochim (2006) states that deciding how you will analyse data collected for a study is to first define the analytical unit. Simply put, the analytical unit refers to the which or what, and this may be a single student or a group to be analysed for the study proposed. The study analyzed financial service providers in South Africa. That is, the unit of analysis was the organization and not the individual.

b) FSP Population

The population for this case study was the South African financial service providers, which belong to the financial banking industry. A population is described as the aggregation of elements that actually select a sample (Mouton and Babbie, 2001). The sampling method is affected by the population (Black et al., 2000). Myers et al. (2002) suggest that a sample is chosen to collect knowledge about the population from which it was taken. It means that the population must be identified and extensively researched before applying sampling techniques.

The population in this study consists of financial service providers in South Africa, namely ABSA bank, Nedbank, Standard Bank, African Bank, Capitec, and the new Tyme bank, amongst others.

c) Sampling Method

Several forms of sampling are possible while conducting research, but researchers typically concentrate on relatively small (Lyell 1998). Research subjects are usually selected for their ability to provide detailed explanations of interactions and to convey perceptions, thus providing rich knowledge that will challenge and improve the understanding of the researcher (Crabtree and Miller, 1992; Hutchinson and Wilson, 1991).

One large financial service provider out of the many forming the financial industry sector was purposefully selected. In terms of research, a data set known as a sample refers to a group of people, objects or items that can be taken for measurement from a larger population. Purposeful sampling was applied for this study, where the chosen financial service provider was chosen on the basis of pre-selected requirements dependent on the research question. Using purposeful sampling was meant to focus on specific characteristics of a financial service provider.

d) FSP Participants

Semi-structured interview participants included individuals who have the knowledge, experience and views about the business and its operations, e.g. CIO, business owners, IT users and managers. The exact number of participants cannot be determined in qualitative research before the study is carried out. The researcher has specially selected participants who can contribute to the research subject and who are willing to share their experiences. The number of participants in qualitative research is guided by the degree to which the study question has been answered (Marshall, 1996; Øvretveit et al., 2002).

e) Data Collection

The study collected primary data through semi-structured interviews with individuals from the selected South African Financial Service Provider. Additionally, Observation was also be applied as a technique to gather an understanding of how FSP's conduct their business. This is the best method to get closer to FSP's and

understand their world fully prior to formulating a conceptual framework. The semi-structured interviews were carried out at the organization's location or a place agreed with participants. The interviews were conducted with decision-makers and individuals that are involved in the day to day running operational running of the business.

Denzin and Lincoln (2005) state that qualitative research stresses the importance of context in data analysis. The participants were able to decide on the venue for their interviews during the research process and particularly during the data collection phase. It resulted in each participant's being interviewed in a position that was convenient to them and selected by them. South Africa is unique with various languages, but English was the language used to conduct interviews and interviews were recorded then transcribed. Each interview lasted for about 30-45mins.

f) Data Analysis

Mouton and Marais (1991) describe an analysis of the data as the mechanism by which a phenomenon is split into its components to better understand it. Data analysis was intended to describe or illustrate data evaluation.

Through this research, versions of digital transformation understanding knowledge were identified from the perspective of the participants rather than an absolute answer to the problem. Inductive studies allow for a subjective approach when interacting with participants. Ibid et al. (2002) claim that content analysis and thematic analysis have become South African content researchers' favourite approaches. Although the ibid. (2002) do not explain the popularity of content analysis and thematic methodologies in South Africa. It can be assumed that the support of postmodern research for multifaceted perspectives and multiple constructed identities fits comfortably with the diverse society of South Africa.

1) Thematic Analysis

Based on what has already been discussed, thematic analysis in this study was deemed necessary. Theme analysis can be described to identify, analyse and document interview data. This details the aggregation and interpretation of a data set (Braun and Clarke, 2006). Data themes can be identified in an inductive manner,' bottom-up ' or in a deductive, theoretical way, ' top-down ' (Boyatis, 1998). The theoretical thematic analysis allows the researcher to code the data based on research questions, where such research questions are influenced by the theoretical lens. Theoretical thematic analysis was thus appropriate for this study and was, therefore, used to analyse the data collected through interviews. The thematic analysis consists of a method of gathering knowledge in order to produce thematic meanings and performance.

2) Content Analysis

Data can also be analysed using content analysis. The cycle requires documentation of emerging topics (Hsieh and Shannon, 2005). The content analysis, which uses a document review methodology, was in the present study followed to make sense of the financial service provider's documents and manuals. According to Bernard (2017), in order to answer a question or to solve a problem, a content review is carefully considered for collecting and understanding information or facts. Of great importance is the assessment of the credibility, trust and order of events. Content analysis was used to categorize objects that are fairly reliable and augmented data analysed through thematic analysis. The most important thing is orderly, logical statements based on the model and the analysis, collection and interpretation of the material to complete the results (Schreier, 2012).

VI. DISCUSSION OF FINDINGS

A. Resource Dependency Findings from Analysis of Financial Service Provider Interviews

Resource dependency finding from FSP interviews are articulated below as per the below subsections with regards to the three contexts of the Technological, organizational and environmental theory per subsection below:

a) Organizational Context

1) What the FSP would do different or change

Finding emphasis that the first thing to change is for individuals and leaders to understand that work is not where FSP employees are. Work is what FSP employees do. There is a culture of micro managing where people are and what time they come into the office. Today's technologies allow individuals to work from anyway, and they should be doing what they are hired to do without being followed around. Literature highlights that micromanagement is generally deemed negative, mostly because it shows a lack of workplace equality (Chambers, 2004). The finding and literature are aligned as they tend to agree that micro Management is not a feasible approach in FSP's.

Moreover, finding stress that FSP should focus on capabilities that they are good at versus what they are not good at. Companies like AWS, Microsoft so forth that own certain capabilities these capabilities should be given to them to run and internally, case units focus on what they are good at. The focus of internal divisions within FSP should be integrating, managing, maintaining software and working with vendors to make systems optimal, not competing with what vendors are doing.

Literature vigorously state benefits with respect to outsourcing are things like labour costs, overhead cost, more flexibility, and the company can focus on other important areas (Malhotra, 2014). However, part of these benefits agrees with the finding, but some of these benefits are in contradiction with some acts that are against job

losses in South Africa. This is pure because once most services are outsourced, people will lose jobs. Furthermore, the researcher argues that from a change management perspective, financial service providers need to consider people when making a transformation journey. The need to teach people and put more emphasis, not just on the issue of sympathy but empathy, also plays a key role in understanding where people are coming from to enable you to lead them better.

b) Technological Context

1) FSP systems design

The finding stresses that systems will always fail; no system is immune to failure. However, systems should be built in a manner that, when they fail, there is little impact on customers. One system failure shouldn't impact all other systems. When one system fails, the functionality should be moved to the next available system automatically. The FSPs refer to this as resilience practices around engineering. This is basically known as fault tolerance within the technology and innovation space. The literature outlines that in high availability or life-critical systems used by organizations, FPS's, for instance, fault tolerance is particularly sought after (González, O., Shrikumar, H., Stankovic, J.A. and Ramamritham, K, 1997). Finding bears a similarity with literature that the ability to maintain functionality when machine parts collapse is called a graceful degradation which talks to fault-tolerance. Fault tolerance is the property that allows FSP's systems to function properly if some of its components malfunction.

Additionally, the findings state that there are several processes during the design identified which are important to the FSP. Things like monitoring the health of the systems 24/7 to ensure no downtime or recovery promptly when that is the case. The literature outlines that system architects have developed various automated tools to manage computer systems operation monitoring (French, R., Tracey, D. and Brandenburg, J, 2003). Ironically, the complexity and challenge for handling such automated tools are increased in some ways. Literature suggests that some of these tools also adds complexity to FSP's environments while finding suggests that the tools are important for monitoring the health of the systems.

Researchers state that 24/7 operations cannot be achieved without staff with the correct skills and experience when coming to system designs. Things like monitoring tools, as outlined by literature, also require some skills to operate and manage them. Systems availability is demand-driven by customer expectations. With the ever-changing world of technology, FSP staff need to keep up with these changes. Therefore, FSP needs to invest a significant amount of time and money to keep the skilled up all the time.

2) FSP challenges

FSP finding maintains that the key challenges within various units in the entire stack is complex relatively old (legacy systems), and this results in a high cost to manage such a stack. Additionally, the old stack will mean a lot of things will need to be maintained or replaced due to the end of life reached. As a result, such a stack is likely to break easily if no changes are brought in in time to mitigate this. The researcher understands a legacy system as an old, before or previous computer system, technology, computer system, or application programme, which is still used. A legacy system is a system with many years of maintenance problems. According to Bennett (1995), legacy systems may be defined informally as large software systems that we don't know how to cope with, but that are vital to our organization. Legacy software was written with outdated techniques years ago but still does useful work.

Additionally, the author states that the relocation and upgrading of this baggage from organisation history is difficult for strategies and techniques, from having reasons for expenditures when working with external contractors to using software comprehension and visualisation techniques. Literature is very explicit with regards to legacy systems that organizations need to find a way to migrate from such and FSP findings argue that it is costly and not always feasible. However, the FSP needs to move with the times in order to adapt to changing environments by introducing newer technology that doesn't break easily.

This finding further asserts that skills are a challenge within the financial service provider. However, they are reliant on things such as graduate programs and experienced resources training newer staff to share skills. Skills are a key challenge within this industry, as a lot of experienced people are retiring immigrating, and this means they will result in a shortage of capabilities required within the industry. FSP will always experience such challenges with respect to resources, and such requires a change in how they recruit and operate. These changes brought new challenges not only to business but also to the education of businesses (Mohamed and Lashine, 2003). Furthermore, the author argues that business schools training potential managers in various disciplines are responsible for closing the gap between their graduates' skills and the skills required on the global markets. Literature aligns with findings that challenges of resources and how organizations operate will always be there with regards to skills, but literature extends this challenge to business schools and colleges to ensure they skill up future employees with current skills required.

Additionally, the findings outline that legal constraints were identified for security and data protection when adopting could computing as a challenge. This is specifically an issue when looking to transfer data to other countries; certain categories of data, by law, are not allowed to cross borders. Legislations that protect the transfer of information is not a South African phenomenon, and it is common around the world. The literature outlines that in an attempt to improve information protection and transfers across borders in

Asia-Pacific Economic Cooperation (APEC), the voluntary protection framework was adopted by all 21 member countries in 2004 (Greenleaf, 2009). Therefore, the FSP will need to align with such a framework in order to manage the legal constraints around security and data while doing business with other countries. As literature points out that this is a global standard utilized by various economies, FSP's will have to comply with this as literature addresses various economies of the world. Furthermore, in 2011, APEC implemented the APEC cross border privacy rules system with the goal of balancing the flow of information and data across borders, essential to trust and confidence in the online marketplace (Marvin and Bowden, 2014).

A researcher argues that the focus is on challenges around culture, the industry has evolved, and people are still used to the old way of doing things. Today's systems require new skills, new thinking and a new way of doing things. The world has changed. There is a thing like software as code that has changed how infrastructure is deployed as opposed to the traditional way of doing things.

c) Environmental Context

1) FSP suppliers and vendors selection criteria

The finding highlights factors such as cost, performance, budget, as well as a number of defects as core pillars when selecting a vendor or 3rd party to work with. These criteria help eradicate issues of costs, longer turnaround times, out of budget and defective products. Additionally, all these criteria will have thresholds that must be met; otherwise, there are penalties imposed if a vendor or 3rd party is found to be on the other side of defined criteria. Additionally, elements such as local presence, track record so forth are defined within the criteria used to select vendors within the financial service provider. The process is driven from a procurement perspective. However, within the South African political construct whereby BEEE targets must be driven, most of the OEM's (Original Equipment Manufacturers) must find local partners to be able to fit into the country's political requirements.

According to (Gencer and Gurpinar, 2007), the selection of suppliers is an initial step in the development of product operations and is vital to companies who want to achieve success under the strict market conditions of today while (Shen and Yu, 2013) states that vendor efficiency is one of the most important capabilities for the supply chain. Literature suggests that suppliers/vendors selection is more of like a step of product operations combined with capabilities which are deemed critical to the organization's survival, however finding contradicts this as the finding puts emphasis on detailed requirements to be met through the FSP process, more of the requirements are standard, but things like Broad-Based Black Economic Empowerment (BEEE) required are context-based as the study focus on FSP's operating in South Africa. Additionally, the finding does not put an emphasis on capabilities as part of the process, as the literature suggests at the forefront of finding cost. The finding seems to be obsessed with supplier/vendor geographical location and cost of the service rather than understanding vendor/supplier capabilities.

Moreover, the researcher states that the financial service provider, like many out there, make use of procurement process, OLA's and SLA's to manage expectations with suppliers on various products and services they deliver. The OLA's and SLA's are deemed to be very detailed to the level of defining who does what when, how and what happens if not done because this help clarify things from on set. However, OLA's and SLA's doesn't mean you will not have a bad experience, and this can still happen. The idea is to ensure that suppliers know they are a partner, not just completing a transaction with the financial service provider.

2) FSP leadership Influence with regards to insourcing and outsourcing

Finding outlines that leadership has limited influence as there are procurement processes to be followed, and they do not want to hinder the process. Leadership will only check who is on the financial services provider's book then. If there is a company known to have certain competencies required, they will be recommended; however, they still need to go through the procurement process and meet all requirements like all other participating companies.

Additionally, the finding states that part of the core leadership role is to ensure that all participating companies adhere to the process and meet the requirements defined. There are no favours for the sake of getting the project, and this will derail projects because of supplier mismatch. Therefore, all participating companies will go thing request information and request quotes as a way to determine cost and budget as per selection criteria defined. Moreover, Procurement is at the heart of all these processes.

Hirschheim and Lacity (2000, p. 100) stress the need to extend backsourcing research complementing existing outsourcing awareness. Many company leaders also face problems with vendor relationships (Deloitte, 2015, p. 3). According to the accounting firm Deloitte (2015, p. 15), lack of flexibility, internal acceptance, low quality and lack of expertise are the key barriers to outsourcing and the primary justification for moving to another solution. Hartman et al. (2017, p. 199) continue to say that the knowledge of the backsourcing mechanism and related factors is insufficient. On this basis, we assume that the same applies to insourcing.

Literature explicitly states that there is limited research within the insourcing and outsourcing processes organizations embark on. Therefore, leadership influence regarding outsourcing and insourcing research seems to be under development. The finding puts emphasis on the procurement process rather than leadership influence when

coming to the outsourcing and insourcing journey organization embark on. Literature and findings bear similarity when coming to challenges leaders face regarding outsourcing and insourcing.
Researchers reiterate that leadership influence is limited where suppliers or 3rd parties are required to deliver certain capabilities on a project. Leadership cannot influence who gets business; this process is factual driven, and business value proposition is at the heart of these decisions.

3) FSP OLA's/SLA's with suppliers and vendors

Finding highlights that suppliers thrive when they are tasked to deliver the standard, simple and straightforward type of tasks that are not complex and tailored to our financial services required. The delivery time is quicker if it is an off the shelf product. However, if the requirement is to do something far complex, like developing new software, things get complicated from requirements collection to the deployment of the product. Issues of quality, cost and time arise when we embark on such a project, and the only way is to hold these suppliers accountable through service level agreements (SLA) and operations level agreements (OLA).

The literature review outlines that service level agreements have been in place since the 1960s, in the same way, that quality management systems have begun, and production has spread to different industries (Hiles and Hon, 2016). Moreover, the use of SLA's/OLA's has now expanded through the public and business sectors. SLA's and OLA's are products of the unhappiness of IT services customers and the absence of objective metrics to determine service quality. SLA's/OLA's outline each internal support group's obligations towards other support groups, including the mechanism and timetable for providing their services. The goal is to provide a simple, descriptive, and observable overview of the internal support relationships between the service provider.

Finding further extend that, Management of service levels are critical in 3rd party relations. In the financial service provider where systems need to be available 24/7, this level of customer experience performance requirements is passed on to partners. For example, mobile applications are common in financial service providers, and customers have become expectant.

Therefore, literature and finding are aligned n the sense that they both argue that SLA's and OLA's are metrics to determine service quality. However, the literature goes further than finding by stating that SLA's/OLA's require a clear definition of service boundaries as well as service responsibilities from supplier/vendor.
Researchers argue that It is important that as part of contracting upfront, the exit arrangements are also included. If not, then it may be difficult to hold their contactor accountable. Unless there is further contracting, there might be less incentive for the partner to oblige. Transitioning from one contract to another would cost them more or present a risk of loss of financial service provider knowledge.

4) FSP supplier and geographical vendor preference

Finding highlights that there are various factors that prompt FSP choice of supplier since the FSP is a crossborder and an international financial service provider with aspirations to operate globally. However, things like the size of the firm the presence locally to help if issues arise even though it can be an international financial service provider. For example, IBM Company operates globally, and locally this would be the kind of suppliers they are keen on considering size and presence.

Third-party risk management market by component report highlight that North America has many leading players in the industry that offer innovative solutions to all vertical industries in the regions (Cunningham, 2006). In addition, the regional scope and strategic investments, alliances and significant research and development programs lead to the strong deployment of effective solutions. The Report suggests that most of the leading suppliers and vendors have a global footprint, which is what the finding suggest as a method to ensure that operation in different parts of the world where FSP operates is smooth.

B. Resource Dependency Findings from Analysis of Financial Service Provider Documents:

Resource dependency finding from FSP documents are articulated below as per the below subsections with regards to the three contexts of the Technological, organizational and environmental theory per

Sub section below:

a) Resource Dependency Findings from Analysis of Financial Service Provider Documents

1) FSP Business activities

- Lend money to our clients.
- Source funding from client deposits and other funders.
- Provide transactional banking facilities and knowledge-based services to clients.
- Market access and risk mitigation products to businesses.
- Revenue from other sources linked to core businesses, as well as strategic investments.

2) Value creation model

Our business model enables us to respond to commercial and social realities in a dynamic environment of competing stakeholder expectations, complex, competitive forces and regulatory pressures. We strive to manage our resources and relationships responsibly in what we do and how we do it to deliver the best outcomes for our clients, our people, our shareholders and other stakeholders.

3) Strategy

FBS strategy is designed to realize the opportunities that Africa presents. Our three key focus areas combine to ensure we offer our clients the solutions they need in the most effective way possible, and our strategic value drivers focus our efforts and measure our progress in delivering value.

4) Partnership

FSP strategic partnership with ICBC assists us in servicing the needs of clients operating within the Africa-China corridor. FSP IS building the capacity of Chinese speaking relationship managers in each of the markets in Africa Regions.

5) Change Management

FSP Change Management is the application of processes and tools to manage the people and technology side of change from a current state to a new future state so that the desired results of the change.

6) People

FSP People are the vehicles that drive organisational goals, and therefore, it is paramount to have leadership and employees that are effective and efficient for optimised organisational outputs.

7) Role of leadership

The FSP sees effective leadership as that which unites purpose and performance by embedding an ethical and risk-aware culture that recognizes that the trust of our stakeholders is the basis on which we compete and win.

8) Business activities and outputs

As an integrated financial services organization with a broad offering of products and services, our business units and corporate functions work together to deliver on our client's needs.

9) Global disruption

Successfully identifying emerging trends is made more difficult given the nature and ever-advancing technologies of the Fourth Industrial Revolution. The World Economic Forum tracks trends shaping future ecosystems that are fundamental to the operations of economies, governments, industries, researchers, scientists, environmentalists, social engineers and financiers. These trends will result in technologies that could impact all aspects of life, including financial and monetary systems and the future world of work and skills requirements.

10) Regulations

Financial supervision, technological innovation and conduct remain key drivers of global regulatory developments, as regulators require robust data protection and privacy controls.

11) Financial inclusion

43% of adults (over the age of 15) in sub-Saharan Africa now have a bank account, up from 34% in 2014. 33% have an account at a formal financial institution, while 21% have a mobile money account, up from just 12% in 2014. While an impressive improvement, more than half the adult population across Africa is still excluded from the formal financial system. The Fin-dex report notes that 'the power of financial technology to expand access to and use of accounts is demonstrated most persuasively in sub-Saharan Africa', where 34% of adults have made or received digital payments in the past year.

12) Infrastructure development

The African Development Bank estimates that infrastructure investment of USD130 to USD170 billion a year is needed across Africa. To support growth, the continent must make the best use of existing infrastructure while developing new infrastructure. For example, the rapid evolution of transport and the development of autonomous vehicles will require investment in new transport infrastructure.

13) Client focus

We delight our clients through personalized client journeys:

- Profitable client relationships built on trust strong strategic partnerships, including our ten-year partnership with ICBC.
- Employees equipped to provide exceptional client experiences.
- Client focused, digitally enabled ways of working.
- Fit-for-purpose branch and ATM network.
- Utilities (direct) and financing activities (indirect).

14) Employee engagement

FSP has a culture of caring, growing, learning and innovation:

- Strong executive and leadership teams.
- Engaged and capable employees.
- Good relationships with employee representatives.
- Reward structures linked to performance and value drivers.
- High-performance ethical culture.
- Investment in training that supports client-focused ways of working.

15) Financial Outcome

How we do business results in increased shareholder returns:

- Competitive investment proposition.
- Affordable access to capital and a resilient and diverse capital structure.
- Competitively reward employees for the value they deliver.
- Good standing in the investment community.

16) Employee development and training

- Building and retaining local skills in our countries of operation.
- Development programmes.

17) Impact

The FSP delivers shared value:

- Supporting socioeconomic development and sustainable markets.
- Working with clients to manage environmental risk, including applying the Equator Principles.
- Viable business and market growth.
- Reputable and ethical brand.

18) FSP Performance indicators

- Net promoter score (NPS) indicates how likely a retail client is to recommend FSP for good service. It is calculated by subtracting detractors from promoters. This value can range from -100 if every client is a detractor to +100 if every client is a promoter. Any score above zero means there is more promoters than detractors.
- The client satisfaction index (CSI) is a measure of the extent to which our corporate and investment clients are satisfied with the service CIB provides. It is calculated using weighted scores for different dimensions, from response times to the effectiveness of client relationship managers.
- Employee turnover: measures the percentage of employees who left our employ during the year.
- Employment equity: measures the representation of black people in management levels in South Africa.

b) ***Technological Context***

1) Digitisation

FSP ensures that people have access to user-friendly digital solutions ranging from self-service capabilities to people management solutions enabled through integrated global systems. Initiatives are underway across the group to introduce digital tools that will improve workplace productivity and employee access to connectivity and collaboration mechanisms. Tailored skills development programmes ensure the future readiness of employees for new roles in line with digital capability requirements.

2) Banking platforms

Technology modernised core banking platforms providing leading-edge digital capabilities. Rapidly changing client expectations and behaviours are driving investment in client-centric technology. Africa, advances in digital and mobile technology has improved financial access, particularly in rural areas.

3) Cloud Computing

It is expected that cloud computing will grow to a USD191 billion industry by 2020. Given that the related risks are relatively unknown and the increased use of complex algorithms and cognitive engines like chatbots, a balanced approach to digitisation is needed to manage any negative impacts on clients, reduce unintentional bias in systems and improve data security.

4) Artificial intelligence

The need to effectively manage artificial intelligence (AI) will increase as resources become scarcer and digital strategies are adopted. To achieve the culture shift needed to accommodate AI will require investment in both people with the necessary technical expertise and in new ways of working to support more complex thinking, problem-solving, flexibility and creativity.

5) Design thinking

Design thinking is the application of design principles to everyday interactions. It covers identifying problems, researching potential solutions and forming ideas, followed by prototyping the ideas. Design thinking helps improve client-centricity by personalising products and services to each client, making them more intuitive and responsive.

6) Data privacy and security

Global concerns around data, privacy and consumer rights are being addressed through new regulations which place significant obligations on financial institutions to protect and use data responsibly and respect clients' privacy rights.

7) Digital currencies and block chain technology

Digital currencies and blockchain technology support client privacy and data protection by enabling anonymous transacting. However, the advent of quantum computing has the potential to undermine the security of the digital economy.

8) Technical Skills development

Responses in the annual employee survey indicate that while most employees are satisfied with their opportunities for career growth and skills development, there is scope for improvement.

9) Cybersecurity

- Stability, security and speed of IT systems.
- The reputational and operational risk associated with third parties, counterparties and suppliers.
- Card fraud is a constant concern.

10) Technology adoption

Adoption of technology means the recognition, incorporation and use in a society of new technology for the FSP. The procedure follows many phases, typically organized by individuals within the technology units.

11) Enterprise technology

FSP enterprise technology is a critical enabler of integrated financial services solutions. We have built enterprise assets that can be leveraged across business units and functions, with modernised IT platforms enabling multidisciplinary operational teams to create innovative digital platforms whose functionality is continually improved.

12) System Integration

The FSP process of integrating the subsystems into a single system (an aggregation of subsystems that cooperate to ensure the system delivers overarching functionality) and ensuring that subsystems function together as a system and in the field of information technology to connect physically or functionally various computing systems and software applications. The benefits of moving from the old to the new platforms are multifaceted and lie largely in the modular nature of the platform, which has clear integration abilities.

c) Environmental Context

1) Competition within the industry

Traditional banks face increasing competition from a range of market entrants, including new digital service providers with propositions that are simpler, more convenient, more transparent and more readily personalised. Rapidly changing client expectations and behaviours are driving investment in client-centric technology. The recent launch of TymeBank, with Discovery Bank and Bank Zero, set to launch in South Africa soon, are examples of new entrants.

2) Politics

Renewed confidence in South Africa has been tempered by factionalism, policy uncertainty and poor governance in state-owned companies undermining institutional capacity. Increasing global tension continues to disrupt international cooperation and trade relations. Sub-Saharan Africa continues to struggle with fragile political stability, although increased political reform has improved economic resilience.

3) Economics

The global economic outlook is subdued, with recent momentum in advanced economies expected to slow, partly due to the trade tensions between the United States (US) and China, suboptimal Brexit negotiations, weakening financial market sentiment and concerns around China's economic outlook. Overall, African economies have been resilient and are gaining momentum through increasing economic diversification and structural transformation to relate jobs and reduce poverty. The IMF7 predicted global growth of 3.5% in 2019. GDP growth in sub-Saharan Africa is projected to rise to 3.5% in 2019 and to 3.6% in 2020.

4) Rapid urbanization and youthful population

By 2050, Africa's population is expected to double with an estimated median age of 20 and 1.5 billion Africans of working age2. As a result, governments will face increasing demands for investment in education, healthcare and basic services. Opportunities exist to increase financial access through low-cost digital transactions in urban centres and fund housing and small business initiatives. To take advantage of these and other opportunities will require the development of additional skills which will contribute to an upskilled financial services industry.

5) Risk and conduct

The FSP has a culture of caring, growing, learning and innovation:

- Constructive relationships and ongoing dialogue with regulators and governments.
- Embedding a risk-aware, compliant and ethical culture.
- Strong internal control systems and risk and compliance frameworks

6) Risks and opportunities

The FSP follows a strategic process to identify the significant risks and emerging threats faced by the group and the countries we operate in. This focuses our attention and prioritizes our responses in addressing the risks, opportunities and threats that may impact our ability to achieve our strategy.

7) Governance

FSP governance and risk frameworks are integrated across our operations to enable enhanced accountability, effective risk management, clear performance management, greater transparency and effective leadership.

8) Operational culture

FSP enables people to deliver value to our clients in an integrated way. A range of cultural programmes and operating model alignment initiatives have been introduced to support the required behavioural shifts and ensure that we have the right people and capabilities in place to achieve integration. We deploy new ways of working to ensure multidisciplinary, agile teams can respond rapidly to changing client and business demands.

9) Compliance

- Policy, regulatory and legal risks in key markets.
- Constructive relationships with regulatory authorities to ensure compliance is adhered to.
- Non-compliance leads Increase in physical security threats/incidents in Africa Regions.

10) Enterprise Risk Management (ERM)

FSP governance framework sets out our approach to managing risk and capital. The framework consists of governance standards, frameworks and policies and is

implemented by board and management governance committees with mandated and delegated authorities. We take a holistic and forward-looking view of the risks we face, continually assessing both current and emerging threats in our operating context.

11) Technology risk

This type of risk is associated with the use, ownership, operation, involvement, influence and adoption of technology within the FSP. It consists of technology-related events and conditions that could potentially impact the business, including technology changes, updates or alterations. A key consideration within technology risk is the group's effective use of technology to achieve business objectives and be competitive.

VII. FSP RESOURCE DEPENDENCY DIGITAL TRANSFORMATION FRAMEWORK

This section outlines the conceptual FSP Resource dependency framework in parts, namely Organizational, Technology and Organizational culture, which cuts across all pillars, and they are articulated as per below subsections, then the framework placed together:

A. Interpretation of elements of the FSP Resource Dependency Digital Transformation Framework

Figure 7 below is a bird view of the contextual resource dependency digital Transformation framework for South African Financial Service Providers:

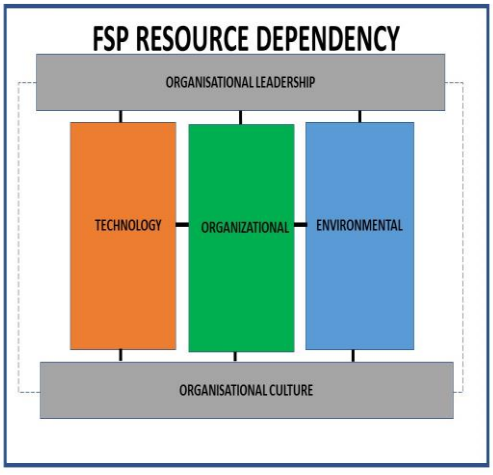

Fig. 7 Resource Dependency Digital Transformation framework for South African Financial Service Providers

This section defines the elements that characterize the framework:

Table 3. Elements of Digital Transformation Framework

Critical Factors	Elements
Organisation Leadership	Role of leadership Client focus Employee engagement Employee development and training/Coaching
Organisational Culture	Micromanaging Changes from a leadership perspective Changing mind-set Collaboration opportunity Alignment to objectives Autonomy Information sharing Visibility of vision
Technology	FSP Skills and Competencies FSP Measure performance Digitisation Banking platforms Cloud Computing Artificial intelligence Design thinking Data privacy and security Digital currencies and blockchain technology Technical Skills development Cybersecurity Technology adoption Enterprise technology System Integration
Organisational	FSP People FSP Description FSP Strategy FSP Leadership FSP Structure FSP Digital transformation FSP Digitization Level FSP Business activities Value creation model Partnership Change Management Business activities and outputs Global disruption Regulations Financial inclusion Infrastructure development Financial Outcome Impact FSP Performance indicators (Net promoter score (NPS) and Client satisfaction index (CSI)
Environment	FSP Risks FSP Competition FSP Compliance FSP External laws FSP Fines and penalties Politics Economics Rapid urbanization and youthful population Governance Operational Culture Enterprise risk management (ERM) Technology Risk

VIII. CONCLUSION

Study findings suggest that digital transformation within FSP in South Africa is either enabled or inhibited by existing resource dependency. The paper argues and concludes that resource dependency ought to manifest cognizant of the FSP's technological, organizational and environmental contexts. The resource dependency digital transformation framework conceptualised unpacks the theoretical, practical, and contextual contributions of this paper.

REFERENCES

[1] Ando, H., Cousins, R. and Young, C., Achieving Saturation In Thematic Analysis: Development and Refinement of A Codebook, Comprehensive Psychology, 3 (2014) 03-Cp.

[2] Arpaci, I., Yardimci, Y. C., Ozkan, S. and Turetken, O., Organizational Adoption of Information Technologies: A Literature Review. International Journal of E-Business and E-Government Studies, 4 (2012) 37-50.

[3] Bennett, K., Legacy Systems: Coping With Success, Ieee Software, 12(1) (1995) 19-23.

[4] Berman, S.J., Korsten, P.J. and Marshall, A., A Four-Step Blueprint for Digital Reinvention. Strategy & Leadership, (2016).

[5] Bernard, H.R., Research Methods in Anthropology: Qualitative And Quantitative Approaches, Rowman & Littlefield, (2017).

[6] Bickman, L. and Rog, D. J., The Sage Handbook of Applied Social Research Methods, Sage Publications.

[7] Black, D., Gates, G., Sanders, S. and Taylor, L., Demographics of The Gay and Lesbian Population in The United States: Evidence From Available Systematic Data Sources. Demography, 37(2) (2000)139-154.

[8] Borgatti, S. J. R. A., Elements of Research, 11 (1999) 2013.

[9] Boyatzis, R.E., Transforming Qualitative Information: Thematic Analysis and Code Development. Sage, (1998).

[10] Braun, V. and Clarke, V., Using Thematic Analysis in Psychology. Qualitative Research In Psychology, 3(2) (2006) 77-101.

[11] Chambers, H., My Way or the Highway, Berrett Koehler Publishers, San Francisco, Retrieved On 20 December 2019, (2004).

[12] Cohen, L. And Manion, L., Research Methods in Education 4th Edition Routledge, London, (1994).

[13] Creswell, J. W. and Creswell, Jd., Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, Sage Publications, (2017).

[14] Cuervo‐Cazurra, A., Mudambi, R. and Pedersen, T., Subsidiary Power: Loaned or Owned? The Lenses of Agency Theory and Resource Dependence Theory. Global Strategy Journal, 9(4) (2019) 491-501.

[15] Cunningham, L. A., Too Big To Fail: Moral Hazard In Auditing and the Need to Restructure the Industry Before it Unravels. Colum. L. Rev., 106 (2006) 1698.

[16] Deloitte., Insights and Trends in the Nordic Market. Finance And Accounting Business Process Outsourcing. [Report], (2015).

[17] Denzin, N.K. and Lincoln, Y.S. (Eds.)., Handbook of Qualitative Research (3rd Ed.), London: Sage, (2005).

[18] Department Of Trade And Industry of the Republic of South Africa, South Africa: Investor's Handbook 2014/2015'. 2015) 61 Http://Www2.Deloitte.Com/Content/Dam/Delotiee/Za/Documents/Taxza_Dti-Investinginsa_2014-15.Pdf Accessed 20 January 2017; National Treasury Of The Republic Of South Africa, 'A Review Framework For Cross-Border Direct Investment in South Africa, (2011) 13. Http://Www.Treasury.Gov.Za/Documents/National%Budget/2011/A%20review%20frameworks%20for%20crossborder%20direct%20investment%20in%20south%20africa.Pdf Accessed 20 January 2017

[19] Depietro, R., Wiarda, E. And Fleischer, M., The Context For Change: Organization, Technology and Environment. the Processes of Technological Innovation, 199(0) (1990) 151-175.

[20] Dremel, C., Wulf, J., Herterich, M. M., Waizmann, J.C. And Brenner, W., How Audi Ag Established Big Data Analytics in its Digital Transformation, Mis Quarterly Executive, 16 (2017) .

[21] Ebert, C. And Duarte, C. H. C., Requirements Engineering For The Digital Transformation: Industry Panel, Ieee 24th International Requirements Engineering Conference (Re), Ieee, (2016).

[22] Ferreira, M., Mouton, J., Puth, G., Schurink, E. and Schurink, W.J., Introduction To Qualitative Research Methods. Hsrc, (1988).

[23] Fitzgerald, M., Kruschwitz, N., Bonnet, D. and Welch, M., Embracing Digital Technology, A New Strategic Imperative. Mit Sloan Management Review, 55(2) (2014) 1.

[24] Frączkiewicz-Wronka, A. and K. Szymaniec. (2012). Resource-Based View and Resource Dependence Theory in the Decision-Making Process Of Public Organization -Research Findings. Management 16(2) (2012) 16-29.

[25] French, R., Tracey, D. and Brandenburg, J., Framework for System Monitoring Sun Microsystems Inc., (2003). U.S. Patent Application 10/012,594.

[26] Gartner., Digitalization. Retrieved 26 January 2020, From Https://Www.Gartner.Com/En/Information-Technology/Glossary/Digitalization.

[27] Gencer, C., And Gürpinar, D., Analytic Network Process In Supplier Selection: A Case Study in an Electronic Form. Applied Mathematical Modelling, 31(11) (2007) 2475-2486.

[28] González, O., Shrikumar, H., Stankovic, J.A. and Ramamritham, K., Adaptive Fault Tolerance and Graceful Degradation Under Dynamic Hard Real-Time Scheduling. In Proceedings Real-Time Systems Symposium (1997) 79-89. Ieee.

[29] Greenleaf, G., Five Years of the Apec Privacy Framework: Failure Or Promise? Computer Law and Security Report. 25. Ssrn 2022907.

[30] Gurbaxani, V. and Dunkle, D., Gearing Up for Successful Digital Transformation. Mis Quarterly Executive, 18 (2019) .

[31] Gustafsson, J., Single Case Studies Vs Multiple Case Studies: A Comparative Study, (2017).

[32] Hartman, P.L., Ogden, J.A., and Hazen, T., Bring It Back? An Examination Of The Insourcing, (2017).

[33] Hiles, A. and Hon, F.B.C.I., E-Business Service Level Agreements: Strategies For Service Providers, E-Commerce And Outsourcing. Rothstein Publishing, (2016).

[34] Hirschheim, R., and Lacity, M., The Myths and Realities of Information Technology Insourcing. Communications of The Acm, 43(2) (2000) 99-107.

[35] Holland, C. P. and Naude, P., The Metamorphosis Of Marketing Into An Information-Handling Problem. Journal Of Business And Industrial Marketing 19(3) (2004) 167-177.

[36] Holotiuk, F. And Beimborn, D., Critical Success Factors Of Digital Business Strategy, (2017).

[37] Hsieh, H.F. and Shannon, S.E., Three Approaches To Qualitative Content Analysis. Qualitative Health Research, 15(9) (2005) 1277-1288.

[38] Huang, J., Henfridsson, O., Liu, M.J. and Newell, S., Growing On Steroids: Rapidly Scaling The User Base Of Digital Ventures Through Digital Innovation. Mis Quarterly, 41(1) (2017) .

[39] Hutchinson, S.A. and Wilson, H.S., Triangulation Of Qualitative Methods, Heideggerian Hermeneutics and Grounded Theory. Qualitative Health Research, 1(2) (1991) 263-276.

[40] Kane, G., The Technology Fallacy: People Are The Real Key To Digital Transformation. Research-Technology Management, 62 (2019) 44-49.

[41] Karimi, J. and Walter, Z., The Role Of Dynamic Capabilities In Responding To Digital Disruption: A Factor-Based Study Of The Newspaper Industry. Journal Of Management Information Systems 32(1) (2015) 39-81.

[42] Kenney, M., Rouvinen, P. and Zysman, J., The Digital Disruption And Its Societal Impacts. Journal Of Industry, Competition And Trade, 15 (2015) 1-4.

[43] Khanchel, H., Digital Transformation: How To Organize The Digital Function Within The Tunisian Company? Review Of General Management, 29 (2019).

[44] Kohli, R. And Johnson, S., Digital Transformation In Latecomer Industries: Cio and Ceo Leadership Lessons From Encana Oil And Gas (Usa) Inc. Mis Quarterly Executive 10(4) (2011).

[45] Kohnke, O., It's Not Just About Technology: The People Side Of Digitization. Shaping the Digital Enterprise, Springer, (2017) 69-91.
[46] Larjovuori, R.L., Bordi, L. and Heikkilä-Tammi, K., Leadership In The Digital Business Transformation. In Proceedings Of The 22nd International Academic Mind Trek Conference, (2018) 212-221.
[47] Lucas, Jr, H. C. and Goh, J.M., Disruptive Technology: How Kodak Missed The Digital Photography Revolution. The Journal of Strategic Information Systems 18(1) (2009) 46-55.
[48] Malhotra, S., Impact of Outsourcing on The Organisations Opting For It. International Journal of Marketing And Technology, 4(3) (2014) 115-122.
[49] Marshall, C. (1996). Designing Qualitative Research. London: Sage, (1996).
[50] Marvin, L. M., and Bowden, Y., Conducting Us Discovery In Asia: An Overview of E-Discovery and Asian Data Privacy Laws. Rich. Jl And Tech., 21 (2014) 1.
[51] Matt, C., Hess, T. And Benlian, A., Digital Transformation Strategies. Business And Information Systems Engineering, 57(5) (2015) 339-343.
[52] Mcdonald, M. and Rowsell-Jones, A., The Digital Edge: Exploiting New Technology and Information for Business Advantage. Gartner E-Books, (2012).
[53] Mcmorrow, D., Digitisation And Digitalisation – You Need To Know the Difference [Online]. Available: Https://Slcontrols.Com/Digitisation-And-Digitalisation-You-Need-To-Know-The-Difference/ [Accessed 26 January 2020].
[54] Mertens, D. M., Research and Evaluation In Education And Psychology: Integrating Diversity With Quantitative, Qualitative, and Mixed Methods, Sage Publications, (2014).
[55] Miles, M.B., Huberman, A.M., Huberman, M.A. and Huberman, M., Qualitative Data Analysis: An Expanded Sourcebook. Sage, (1994).
[56] Miner, J. B., Organizational Behaviour 2: Essential Theories of Process and Structure, Taylor and Francis, (2015).
[57] Mohamed, E. K., and Lashine, S. H., Accounting Knowledge and Skills and The Challenges of a Global Business Environment. Managerial Finance.
[58] Mouton, J. and Babbie, E., The Practice of Social Research. Cape Town: Wadsworth Publishing Company, (2001) 871-890.
[59] Myers, M.D. and Avison, D. Eds., Qualitative Research In Information Systems: A Reader. Sage, (2002).
[60] Nambisan, S., Lyytinen, K., Majchrzak, A. and Song, M., Innovation Management: Reinventing Innovation Management Research in a Digital World. Mis Quarterly, 41 (2017).
[61] Oliveira, T. And Martins, M.F., Understanding E-Business Adoption Across Industries in European Countries. Industrial Management and Data Systems., 110(9) (2010) 1337-1354.
[62] Orbele, S., Motivational and Volitional Processes in Action Initiation: A Field Study of Implementation Intentions. Journal Of Applied Social Psychology, 30(4) (2002) 780-797.
[63] Osman, T., Digitisation Vs Digitalisation: What it Means For Your Business [Online]. Available: Https://Idm.Net.Au/Article/0012227-Digitisation-Vs-Digitalisation-What-It-Means-Your-Business [Accessed 26 January 2020].
[64] Øvretveit, J., Bate, P., Cleary, P., Cretin, S., Gustafson, D., Mcinnes, K., Mcleod, H., Molfenter, T., Plsek, P., Robert, G. and Shortell, S., Quality Collaboratives: Lessons from Research. Qual Saf Health Care, 11(4) (2002) 345-351.
[65] Pfeffer, J. and G. R. Salancik., The External Control Of Organizations: A Resource Dependence Perspective. The University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference In Entrepreneurship, (1978)
[66] Rachinger, M., Digitalization and Its Influence on Business Model Innovation. Journal of Manufacturing Technology Management 30(8) (2019) 1143-1160.
[67] Reis, J., Amorim, M., Melão, N. and Matos, P., Digital Transformation: A Literature Review and Guidelines For Future Research. In World Conference on Information Systems And Technologies, (2018) 411-421. Springer, Cham.
[68] Ross, J.W., Sebastian, I., Beath, C., Mocker, M., Moloney, K. And Fonstad, N., Designing and Executing Digital Strategies, (2016).
[69] Ryynänen, T. and T. Hyyryläinen., Digitalisation of Consumption and Digital Humanities-Development Trajectories and Challenges for the Future. Dhn, (2018) 363-371.
[70] Schreier, M., Qualitative Content Analysis in Practice. The Scientific Study of Literature. 3 (2012) 165 – 168. Selection Criteria. Procedia Computer Science, 17 350-356.
[71] Shamoo, A.E. and Resnik, D.B,. Responsible Conduct of Research. Oxford University Press, (2009).
[72] Shen, C. Y., And Yu, K. T., Strategic Vender, (2013).
[73] Tornatzky, L. and Fleischer, M., The Process of Technology Innovation. Lexington, Ma: Lexington Books, (1990) 165.
[74] Trochim, W. M., The Research Methods Knowledge Base, 2nd.Edition. Internet Www Page, At Url: Http://Www. Social Research Methods. Net/Kb/(Version Current As Of October 20, (2006).
[75] Ven, K. And Verelst, J., An Empirical Investigation Into The Assimilation of Open-Source Server Software. Communications of the Association for Information Systems, 28(1) (2011) 9.
[76] Wade, M., A Conceptual Framework For Digital Business Transformation, A Global Center For Digital Business Transformation, An Imd and Cisco Initiative, (2015)
[77] Wade, M., Noronha, A., Macaulay, J. And Barbier, J., Orchestrating Digital Business Transformation, (2017).
[78] Westerman, G., Bonnet, D. and Mcafee, A., Leading Digital: Turning Technology Into Business Transformation, Harvard Business Press, (2014).
[79] Westerman, G., Calméjane, C., Bonnet, D., Ferraris, P. and Mcafee, A., Digital Transformation: A Roadmap For Billion-Dollar Organizations. Mit Center for Digital Business And Capgemini Consulting, 1 (2011) 1-68.
[80] Wodak, R. and M. Meyer., Critical Discourse Analysis: History, Agenda, Theory and Methodology. Methods of Critical Discourse Analysis, 2 (2009) 1-33.
[81] Yin, R., Case Study Research: Design and Methods. Newbury Park, Rev. Ed, Sage Publications, (1991)

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