Institutional isomorphism in digital business strategies of financial services firms in South Africa.

Literature Review and Methodology

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A document submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

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Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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Naömi Bloem

Signed on 7 November 2018 at the Gordon Institute of Business Science, Illovo

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To whom it may concern:

Identification of and motivation for target journal

Concerning the article titled: *"Institutional isomorphism in digital business strategies of financial services firms in South Africa*."

The Information Systems Journal was chosen as this journal has built its reputation on publishing qualitative research and has expressed an interest in articles which integrate technological disciplines with social-, contextual- and management issues.

The journal has an impact factor of 4,276 which indicates that the journal publishes articles with a high frequency of citation and therefor it can be inferred that the journal has a high relative importance in the field of information systems and practises.

This journal was deemed appropriate for research of the application of Institutional Theory in the context of digital business strategies. The reasons being:

I. The research performed was a qualitative-descriptive study which investigated the phenomenon whereby management imitate competitive actions of others, such as decisions relating to the adoption of certain technological decisions, in the context of digital business strategy which is a fusion of business and IT strategy.
II. The journal also emphasizes the importance of the context of the research as well as the theoretical and practical implications thereof. This research is deemed appropriate as the context has been defined in detail and contributes both to the existing body of knowledge and to business.

Journal specific guidelines include:

I. Many different manuscript types are accepted of which includes research articles not exceeding 10 000 words of main text.
II. The journal allows for a more condensed research methodology section which promotes ease of reading the article. This allows for the journal to attract a wider, often less academic audience. This condensed research methodology section format was used in the article but a more detailed research methodology section is included in this document.
III. The journal allows for the use of pronouns such as “we” instead of the more academic phrases such as “the authors” or “the researchers”. This again contributes to an easier reading experience by a wider audience. The practise of using “we” instead of “the authors” has been adopted in the article.

On a more personal dimension, the journal has in recent years ensured a more inclusive submission process increasing the number of women as editors and authors in a larger group of countries. This is important as the author believes that in diversity we can be more creative and fair.

Naömi Bloem is the corresponding author and Professor Louise Whittaker the second author.

Yours sincerely,

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1 The Research Problem

Business finds itself in a predicament. There are many advantages to sharing and allowing the imitation of digital business strategy (DBS) design components, which allow for firm legitimacy, interoperability and sharing of information (Bharadwaj, El Sawy, Pavlou, & Venkatraman, 2013a; Hinings, Gegenhuber, & Greenwood, 2018; Kahre, Hoffmann, & Ahlemann, 2017; Markus & Loebbecke, 2013). However, the degree of imitation that is preferable between businesses in the same industry has not been defined. It is unclear what design components of DBS require imitation to improve legitimacy, facilitate the pooling of information to leverage off network effects and to facilitate interoperability (Bharadwaj, El Sawy, Pavlou, & Venkatraman, 2013b; Grover, 2013; Markus & Loebbecke, 2013) before the behaviour starts dissipating the differential value of a DBS (Barney, 2001; Sánchez-Montesinos, Opazo Basáez, Arias Aranda, & Bustinza, 2018).

2 Theory and Literature Review

2.1 Introduction

This section will present the definition of a DBS as well as a discussion of its design components or the resulting competitive actions. Thereafter, the study will consider the use of Institutional Theory to explain the rationale behind industry-level imitation. The research purpose, choice of methodology and design are discussed in detail before a comprehensive list of references is presented.

2.2 Digital Business Strategy

2.2.1 Definition

Improvements in digital technologies are reshaping traditional business strategy, enabling dynamic capabilities, transforming social relationships and facilitating cross-boundary industry disruptions (Bharadwaj et al., 2013a). DBS is a new type of business strategy whereby Information Technology (IT) is not simply a functional-level strategy but rather a fusion of IT strategy with traditional business strategy (Bharadwaj et al., 2013a; Kahre et al., 2017). DBS is a pattern of intentional decisions taken and executed by a firm. It competes by offering digitally enabled services and products (Woodard, Ramasubbu, Tschang, & Sambamurthy, 2013). DBS represents a strategy that leverages off digital resources, triggered by the emergence of innovative and disruptive technologies, to create differential value (Kahre et al., 2017).

2.2.2 Development

Kahre et al. (2017) apply a model of strategic change developed by Rajagopalan and Spreitzer (1997) to illustrate the emergence of DBS from the traditional view of IT strategy aligned to the greater business strategy. The model shown in Figure 1 illustrates how environmental and organisational conditions and changes lead to changes in the content of business strategy. The organisational conditions and changes include organisational governance and power structures, service ecosystems, innovative technologies and environmental turbulence. This in turns leads to the formation of a DBS that manifests as certain organisational outcomes (Rajagopalan & Spreitzer, 1997).

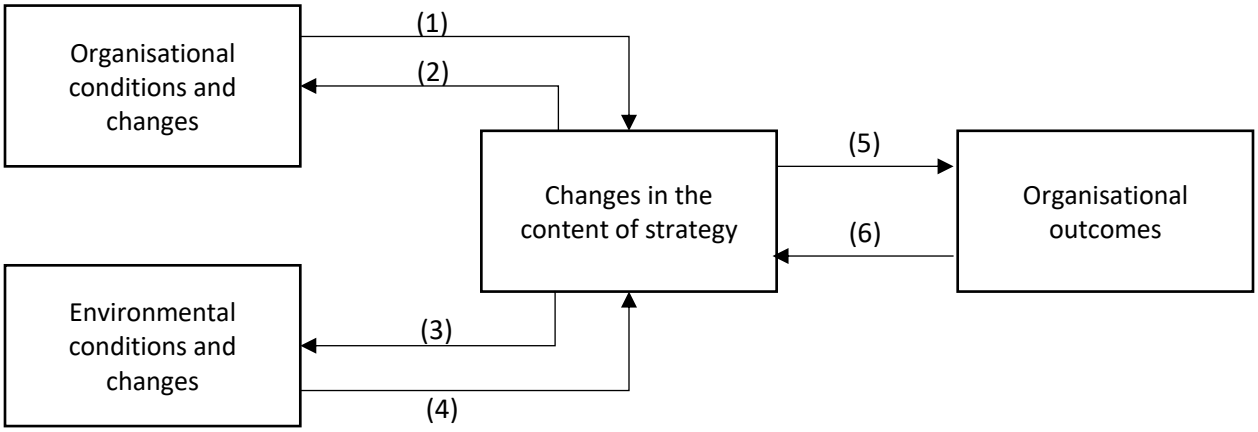

Figure 1 Analytical framework adapted from Rajagopalan and Spreitzer (Kahre et al., 2017)

These organisational outcomes with respect to DBS propose changes in business model components (Kahre et al., 2017), which include value propositions, customer relationships, customer segments, channels, revenue streams, key resources, key activities, cost structure and key partnerships (Demil & Lecocq, 2010; Johnson, Christensen, & Kagermann, 2008; Pagani, 2013). These business model components will act as proxies for DBS design components in this study.

Value Proposition

Value propositions should be compelling to customers, be able to achieve cost leadership, comprise advantageous risk structures and enable remarkable value capture by the business (Teece, 2010; Woodard et al., 2013). Digital technology developments allow for lower cost customer solutions. As a result, firms must re-evaluate their customer value propositions by

means of innovations in services, products and business models (Kahre et al., 2017; Sánchez-Montesinos et al., 2018; Teece, 2010).

Value propositions supported by DBS include advantages such as improved accessibility, affordability, wider social connectivity (Sánchez-Montesinos et al., 2018; Sia, Soh, & Weill, 2016) and new user experiences (Frey, Trenz, Veit, & Frey, 2017). Firms can further create new value propositions by exploiting information sharing in the digital context (Sánchez-Montesinos et al., 2018).

Customer Relationships

Firms must develop the capabilities to address continually changing customer needs by innovative solutions, quick response, seamless integration across siloes and personalised interactions (Sia et al., 2016; Woodard et al., 2013). This requires that the firm's operational capabilities are supported by robust and flexible enterprise platforms to facilitate digital collaboration and shared processes and infrastructure (Bharadwaj et al., 2013a; Sia et al., 2016), which results in frictionless customer experiences.

Customer Segments

Digital innovation disrupts traditional value chains by often increasing the scope of business strategies to include new products, services, markets and customer segments (Kahre et al., 2017).

Channels

Traditional positioning was concerned with decisions regarding price, quality and service. DBS provides firms with the opportunity to further entrench themselves in a unique competitive position (Sunil Mithas, Tafti, & Mitchell, 2013). This can be achieved if IT systems are effectively leveraged (Kahre et al., 2017). For example, Volvo Cars see the car as a platform in multi-sided markets. They allow the firm to tap into other business transactions by selling consumables such as GPS services through the vehicle's onboard operating system, which is connected to the web. This effectively made vehicle consoles a new distribution channel for selling services to car users (Svahn, Mathiassen, & Lindgren, 2017).

Revenue Streams

The DBS employed by Volvo Cars involved changing their strategic focus to offer the connected car as a new value proposition to consumers. Through it, they could create new end-user experiences and generate potential new revenue streams (Svahn et al., 2017).

Key Resources

The resource-based view perceives the ability to leverage (digital) resources that are valuable, rare and inimitable and which facilitate coordination to create a competitive advantage for a firm (Barney, 2001; Bharadwaj et al., 2013b; Frey et al., 2017; Woodard et al., 2013).

Digital resources are an integral part of all organisational areas. It is used to share, integrate and process information from internal and external sources to create omni-channel experiences for customers, to facilitate data exchange and for faster decision-making (Weinrich, 2017).

Digital resources can further be shared within the organisation and within the larger business ecosystem to facilitate interoperability. This takes place by means of resource sharing, promoting network effects, expanding the possible scope of business strategy and promoting business ambidexterity (Bharadwaj et al., 2013a). Open application programming interfaces (APIs) create the potential for improved data pooling and interoperability. Adopting a Cloud approach design allows solutions to be scalable, more dynamic and fluid (Svahn et al., 2017).

In contrast to the physical or tangible resources, human resources relating to DBS require firms to develop strong competencies in technology integration, coordination of multilateral relationships and ideation (Frey et al., 2017; Kahre et al., 2017; Sia et al., 2016). DBS also requires different leadership capabilities than traditional business and IT strategies. Leaders must be capable of embracing information transparency, adaption and resilience (Bharadwaj et al., 2013a; Sia et al., 2016). In addition, they must have an understanding of the impact of market disclosure and inadvertently revealing strategic direction by means of digital moves (Bharadwaj et al., 2013a).

Key Activities

Markus and Loebbecke (2013) discern between standardised business processes and commoditised business processes. The former refers to processes which are standard among businesses such as forecasting, budgeting and promotional tracking. These processes can be tailored to the firm's specific requirements. Commoditised business processes refer to standard business processes that are performed in the same way by almost all members in the business community, including competitors. Commoditised business processes develop as a result of the use of community platforms, such as many popular ERP systems. The result is process parity which facilitates interoperability (Markus & Loebbecke, 2013).

Diverging from standardised and commoditised processes, appropriate business processes that lever digital resources enhance value creation for customers (Kahre et al., 2017). The DBS of

Volvo Cars made use of crowd sourcing to source innovative ideas for their connected car value offering. The product development process changed into a more integrated approach whereby the traditional waterfall design methodology had to be replaced by a more agile approach (Svahn et al., 2017). The Digital Bank of Singapore launched periodic technology road mapping workshops, a customer journey laboratory and strategic incubation programmes, internal crowd sourcing and hackathons (Sia et al., 2016).

Cost Structure

Organisational redesign is of paramount importance in the adoption of a DBS and should address all organisational design components, such as structure, processes, rewards and people to ensure alignment and coordination (Weinrich, 2017). Volvo Cars employed structured multi-disciplinary teams to enable cross-fertilisation of the innovation environment. This in turn enables pooling of information and interoperability, and leads to network effects in the innovation process (Svahn et al., 2017). The Digital Bank of Singapore employed a Chief Information Officer (CIO) to report to the Chief Executive Officer (CEO). The rest of the executive team report to the CIO to facilitate cross-functional collaboration and interoperability. They also appointed a head of process transformation, head of customer experience and head of innovation (Sia et al., 2016). DBS can result in significant cost savings by reducing labour cost by means of automation of menial tasks, but could also result in increased labour cost as development resources are scarce and expensive (Woodard et al., 2013).

Key Partnerships

Networks of competitors, partners and customers are induced by digitalisation to form interdependent, co-creating entities. These should be included in the DBS as it requires appropriate processes, roles and the synchronisation of IT and resources (Kahre et al., 2017). Volvo Cars employed a co-creation model which differed from the traditional buyer-supplier relationship as suppliers then saw themselves as external entrepreneurs engaging with a market place. The traditional transactional model employed when engaging with suppliers was no longer relevant in this case and the purchasing department had to integrate with the legal department to come up with a more relationship-based arrangement (Svahn et al., 2017).

Value chains should be aligned to ensure superior execution and delivery of value to customers (Woodard et al., 2013). The speed required for competitive product launches, decision-making and supply chain orchestration can be effectively supported by digital capabilities (Bharadwaj et al., 2013b).

2.2.3 Concluding DBS

DBS design components such as value proposition, customer segments, channels and revenue streams are sources of differential value for the firm (Frey et al., 2017; Sánchez-Montesinos et al., 2018) and should be unique to the firm. Design components such as customer relationships, key resources, key activities, cost structure and key partnerships are argued to be sources of differential value (Barney, 2001; Frey et al., 2017; Kahre et al., 2017; Sia et al., 2016). However, they also facilitate pooling of information, network effects and interoperability (Bharadwaj et al., 2013a; Markus & Loebbecke, 2013; Weinrich, 2017), which may result in a certain degree of imitation among firms.

Further to this, the tangibility and visibility of certain design components might make them more prone to imitation (Chandler & Hwang, 2015). Design components such as channels (Frey et al., 2017) and the value proposition (specifically digital products and services) and organisational structure such as the appointment of a CIO (Weinrich, 2017) – are more visible design components and therefore more easily imitated. The diffusion of innovations and practices such as enabling technologies or digital resources through an industry drives imitation as firms do not want to be perceived as lagging (Chandler & Hwang, 2015).

3 Institutional Theory

3.1.1 Application

Institutional Theory has been applied in explaining adoption practices of firms in the fields of company social responsibility, supply chain management practices and sustainable procurement. Institutional Theory widens the perspective of firm-level behaviour, which is relevant to such a highly interdisciplinary field (Grob & Benn, 2014). It explains “adoption from the perspective of interactions with a wide range of stakeholders encompassing multiple dimensions” (Grob & Benn, 2014, p. 12). Institutional Theory thus addresses the larger ecosystems within which firms operate and the associated coordination of multilateral relationships with increasingly complex, complicated and vocal stakeholders (Bharadwaj et al., 2013b) at the centre of DBS.

3.1.2 Perspectives

Institutional Theory can be viewed from two perspectives; from that of the practice or innovation, which is imitated, or from the perspective of the adopter.

The likelihood of an innovation or practise being adopted is influenced by its technical complexity and characteristics such as tangibility, ambiguity, stickiness, influence and visible implications of adoption (Chandler & Hwang, 2015).

The adopter's perspective focuses on the micro foundations of Institutional Theory, which include mindfulness and scope. Mindfulness is the firm's ability to adapt and apply adopted innovations and practices into a new context, instead of the passive adoption of the innovation or practice into the same context. This relates to firm-level learning whereby the firm's absorptive capacity influences whether the firm will innovate itself or imitate others. Absorptive capacity refers to the firm's ability to identify the value of new information, understand it and apply it to create economic value (Chandler & Hwang, 2015). Firm characteristics which influence its absorptive capacity or ability to mindfully learn include the level of research and design, alignment, public visibility, firm size and age (Chandler & Hwang, 2015). Scope constitutes the context of the firm, such as geographic location, industry, network, alliances and geographic and social proximity. Social proximity refers to the psychological phenomenon whereby individuals form relationships with others that are nearby (Chandler & Hwang, 2015).

3.1.3 Types

The term "isomorphism" explains the forces faced by organisations which result in imitation (DiMaggio & Powell, 1983). There are two forms of Institutional Theory: the economic variant and the sociological variant. In the first, organisations imitate for the purpose of efficiency. In the latter, organisations imitate for the purpose of legitimacy (Kauppi, 2013). Early imitators of innovation typically do so for the economic benefit, while later imitators do so for legitimacy purposes (Chandler & Hwang, 2015).

3.1.4 Economic Variant

The economic variant of Institutional Theory is adopted for purposes of economic efficiency and profit maximisation. It consists of three types of imitation, namely frequency-, trait- and outcome-based imitation (Haunschild & Miner, 1997).

Frequency-based Imitation

Frequency-based imitation occurs when many firms have adopted a certain practice. This then becomes the norm, which is often taken for granted and adopted without proper due diligence (Kauppi, 2013). Increased levels of availability, awareness and attractiveness of practices that have diffused through an industry add pressure to firms to adopt such practices (Chandler & Hwang, 2015). One could argue that commoditised processes facilitated by the use of

commoditised platforms such as popular ERP systems (Markus & Loebbecke, 2013) are illustrative of the occurrence of frequency-based imitation.

Trait-based Imitation

Trait-based imitation is observed when organisations are imitated based on selected features, such as performance, size, prestige, industry or region (Kauppi, 2013). Industry forces such as low competition and high growth will have a firm conform to the industry norm – thus imitating others (Sunil Mithas et al., 2013).

Outcome-based Imitation

Outcome-based imitation or benchmarking is observed when an organisation's competitive actions are copied by others due to a perceived success that these actions brought to the organisation (Kauppi, 2013). Successful innovations and practices typically diffuse at a faster pace through an industry compared to complex, technically difficult innovations (Chandler & Hwang, 2015). Grover (2013) warns against organisational transparency or making digital resources, capabilities or processes visible and thus more susceptible to imitation, which could dilute the differential value of these resources, capabilities or processes.

3.1.5 Sociological Variant

DBS is not just a means of increasing operational efficiency and effectiveness of internal operations but also a response to competitors in the competitive environment and growing stakeholder demands (Sunil Mithas et al., 2013). Hinings et al. (2018) corroborate the social variant of Institutional Theory by referring to organisations as not being a purely rational system but rather a system exposed to other social and cultural systems which have expectations and act prescriptive in what is considered appropriate behaviour. Firms are constrained by social expectations and approval (Hinings et al., 2018) and institutions enforce set rules and informal constraints (Child & Tsai, 2005).

Industry characteristics constitute a socially constructed framework which may enable or constrain the firm's actions in adopting certain practices and innovations. The characteristics include political influence, regulatory oversight and legal ambiguity (Chandler & Hwang, 2015). Imitation for purposes of legitimacy is facilitated by coercive, mimetic and normative mechanisms (Kauppi, 2013).

Coercive Isomorphism

Coercive isomorphism arises due to pressures from organisations on which they depend as well as from societal expectations (DiMaggio & Powell, 1983). Such cultural and governmental pressures are illustrated in the adoption of certain green-purchasing regulations which later become minimum firm standards or hygiene factors (Grob & Benn, 2014). Often the risk-averse behaviour of management will drive them to consider DBS as a competitive necessity or hygiene factor, which leads to the imitation thereof (Sunil Mithas et al., 2013).

Large public and typically older firms are often more susceptible to organisational pressures to adopt certain practices and innovations. They are more likely to engage in more symbolic and cheaper adoption behaviour, such as imitation, to minimise external scrutiny (Chandler & Hwang, 2015).

Further to this, end consumers have an expectation of firms to be very well informed, spoiled and empowered by means of technology. As a result, firms are coerced into adopting a transparency strategy. This puts pressure on the upstream value chain to be more transparent with regard to information about product features, price, quality and provenance. To be competitive in a digital business environment, firms must have a proper transparency strategy in place (Granados & Gupta, 2013).

Mimetic Isomorphism

The volatility of certain economic, political and institutional factors contributes to higher levels of risk and uncertainty (Xu & Meyer, 2012; Young, Tsai, Wang, Liu, & Ahlstrom, 2014). As a result, firms are more inclined to imitate the competitive actions of their more successful counterparts to mitigate the risks and to reduce the potential impact of these factors (Young et al., 2014).

Firms that find the need to respond to high levels of complexity are likely to adopt a business model aligned with that of the industry (Ocasio & Radoynovska, 2016). The interaction between strategy, IT and the business environment is complex, which derails executives from developing a vision to strategise with information (Granados & Gupta, 2013). This behaviour is defined as mimetic isomorphism (Zsidisin, Melnyk, & Ragatz, 2005). Contributing to mimes are frameworks, systems, alliances and programmes such as “global reporting initiatives” as well as regulatory frameworks and associations, such as banking associations and regulatory boards (Grob & Benn, 2014).

Normative Isomorphism

Normative isomorphism arises when professionals or employees with key skill sets move between organisations and instil the same structures, approaches and thinking across organisations

(Kauppi, 2013). Proselytisers such as consultants and professionals contribute to the dissemination of ideas and practices within and across industries. This in turn reduces the need for firm-level learning and increases sources of imitation (Chandler & Hwang, 2015).

Greater mutual awareness in less crowded markets results in a higher likelihood of firms noticing and imitating competitive actions of rivals (Sunil Mithas et al., 2013). In addition, information regarding IT spend in an industry is more readily available. IT activities are easily observable and normative signals pertaining to trends in DBS arise from IT conferences where key industry players exchange strategic information (Grover, 2013; Sunil Mithas et al., 2013).

Heterogeneity in Business Models

Institutional pluralism and complexity within a firm or field are sources of firm-level heterogeneity as it allows for various institutional logics to manifest, which create legitimacy for firms. This means that firms do not have to imitate their counterparts to achieve a certain level of legitimacy (Ocasio & Radoynovska, 2016). Different combinations of institutional logics form governance structures and business models, such as customer segments, value propositions, distribution channels and long-term partnerships. Stakeholders such as regulatory bodies, government institutions and consumer protection institutions can influence the institutional logic, which is typical in heavily regulated industries (Ocasio & Radoynovska, 2016). Such industries include financial services such as banking and the pharmaceutical fields.

However, when firms apply innovations and practices in a different context, thus applying mindfulness learning and not passive adoption, they do not necessarily consider the efficacy of what they are adopting. Pioneering can be perceived as illegitimate behaviour, especially if the level of diffusion of the innovation or practice in the industry is still low and field-level factors such as regulation, political influence and legal ambiguity are rife (Chandler & Hwang, 2015). This therefore creates the perception of illegitimacy, which in turn drives risk-averse firms to rather imitate than pioneer.

3.1.6 Concluding Institutional Theory

Some overlap exists between the economic and the social variants of Institutional Theory. Both trait-based imitation and mimetic isomorphism are concerned with the level of uncertainty presented by the business environment. Conversely, both outcome-based imitation and normative isomorphism are concerned with benchmarking (Kauppi, 2013).

“If the system from which a firm successfully appropriates value is visible to external entities, there is an incentive for competitors to imitate and appropriate the same value” (Grover, 2013, p.2).

Normative isomorphism can result in imitation of less transparent DBS design components, such as value proposition, channels, customer segments, revenue streams and certain intangible key resources. The reason is that individuals that are privy to these DBS design components will be the primary source of information (Grover, 2013). In comparison, the other forms of imitation require a certain degree of organisational transparency. Information design components such as more tangible or visible key resources, key activities, cost structure and key partnerships can be extracted from secondary sources, such as industry publications and annual reports (Grover, 2013; Mithas et al., 2013).

4 Conclusion

The following propositions were tested:

1. DBS design components such as processes, resources and capabilities are adopted under the economic variant of Institutional Theory (Grover, 2013; Markus & Loebbecke, 2013; Sunil Mithas et al., 2013).
2. Resources, processes, organisational structure and value chains are imitated due to coercive isomorphism (Sunil Mithas et al., 2013).
3. Processes, organisational structure and value chains are imitated due to mimetic isomorphic pressures (Grover, 2013).
4. Value creation, capabilities, positioning, resources, processes, organisational structure and value chains are imitated due to normative isomorphic pressures (Grover, 2013; Sunil Mithas et al., 2013).
5. Components such as resources, processes, capabilities, organisational structure and value chains allow for interoperability and leveraging off network effects and can be imitated to a certain degree (Bharadwaj et al., 2013a; Markus & Loebbecke, 2013; Weinrich, 2017).
6. Components such as value proposition (Frey et al., 2017; Sánchez-Montesinos et al., 2018), resources (Barney, 2001), processes (Kahre et al., 2017), capabilities (Frey et al., 2017; Kahre et al., 2017; Sia et al., 2016), positioning and value chains can create differential value for the firm and should be protected.

5 Proposed Research Methodology and Design

5.1 Introduction

This chapter provides an overview of the research methodology employed. This section starts by outlining the qualitative study embarked on to investigate the imitation of DBS within the chosen population of the financial service sector in a South African context. The methods of data collection and analysis of data are then discussed and concerns regarding credibility, transferability, dependability and confirmability of the study are addressed.

5.2 Research Design

The field of DBS is still in its infancy (Bharadwaj et al., 2013a). A qualitative research study was therefore chosen as it is best suited to provide the researcher with the opportunity to understand the phenomenon from the perspective of those who experience it (Vaismoradi, Turunen, & Bondas, 2013). Data used in qualitative studies are typically narrative in nature (Hyde, 2009) and can be descriptive, process-oriented and sequential (Creswell, Hanson, Clark Plano, & Morales, 2007). Data for qualitative studies are typically collected by means of interviews, case studies, documents, observation and artefacts, and can be highly structured or conducted with little structure (Creswell et al., 2007). For this study, data were collected by means of semi-structured interviews.

The researcher employed a pragmatic research philosophy in investigating the phenomenon whereby firms imitate the behaviour of other firms with regard to DBS within an industry. Creswell (2012) defines pragmatism in the context of research as a focus on the outcomes of the research. Individuals that subscribe to this view have freedom of choice pertaining to research methods, techniques and procedures to ensure that these choices best meet the needs and purpose of the study. This philosophy is coherent with a deductive research approach and qualitative research strategy (Dudovskiy, 2018).

The purpose of the study was to gain insights into industry perception of acceptable imitation of DBSs. The study was descriptive in nature and required inputs from those who were experiencing the phenomenon of isomorphism with regard to DBS. Saunders, Lewis, and Thornhill (2008) corroborate the use of a descriptive study in that it portrays an accurate view of events, situations or individuals.

A mono-method, cross-sectional, qualitative study was performed. Saunders, Lewis, and Thornhill (2008) suggest that pragmatism can be achieved by applying a practical approach to

the research. Different perspectives from key industry participants were integrated to assist in the collection of data and the interpretation thereof. Primary data were therefore collected from semi-structured interviews with industry participants. Transcripts of in-depth interviews are deemed appropriate sources of data for qualitative study (Hyde, 2009).

Deduction is theory testing whereby the researcher starts with a theory and determines whether the theory applies to a specific instance (Hyde, 2009). The “establishment of a priori theoretical framework is a necessary step in qualitative research” (Zsidisin et al., 2005, p. 3406). Institutional theory was used to categorise the type of institutional isomorphism which was observed in the chosen industry and used to further unpack the rationale behind the behaviour. DiMaggio and Powell (1983) suggest institutional isomorphism as a useful framework as it explains the politics and ceremony that imbue organisations. Zsidisin et al. (2005) embarked on a similar study whereby they applied Institutional Theory in the adoption of business continuity planning in supply chains. The author aimed to follow the same approach using deduction by applying the theory in the context of the firm DBS.

Dependability ensures trustworthiness of the study by enabling replication of the study (Shenton, 2004). Dependability was addressed by reporting on the research process at the highest possible level of detail in this document.

5.3 Population

The study aimed to determine isomorphic behaviour within a defined industry. It was thus prudent to choose an industry that is affected by the development of digital technologies, where the probability of firms adopting a DBS was high and where imitation was probable. Business Monitor International (2018) reports the financial services industry to be the sector that represented the most overweight IT spending vertical. They forecasted a strong outlook and rapid growth, with technology driving waves of innovation. For this reason, the financial services sector was chosen for the study. The financial service sector includes banks, stock brokerages, investment funds as well as credit card, insurance, accountancy and consumer finance companies (Business Monitor International, 2018b). Further to this, Chandler and Hwang (2015) argue that firms are prone to imitate as a result of public visibility, firm size, location and social proximity. Given that the South African financial sector is highly regulated, which contributes to mimesis, they are incentivised to increase their public visibility to gain the trust of consumers. The banking sector in South Africa in particular is highly concentrated and consists of four large banks (Business Monitor International, 2018a). Further to this, the head offices of these financial services firms are mostly

located within a square mile within the largest city in South Africa, which means individuals in these institutions work in very close proximity to that of their counterparts. The population was therefore chosen to consist of executives in firms in the financial services industry in South Africa.

5.4 Sampling

Saunders et al. (2008) propose assessing the reputation or authority of the source when establishing reliability and validity. As part of the sampling process, the author endeavoured to select only reputable and knowledgeable individuals to participate in the semi-structured interviews. These individuals were selected based on their position within the organisation. The author aimed to collect data from only executives in the chosen firms.

Candidate firms were identified by means of expert opinion, past-experience of the research team and by pre-screening integrated research reports. The International Integrated Reporting Framework "promotes the communication of all factors that materially affect the ability of the organization to create value" (The International Integrated Reporting Council, 2013, p. 20). Further to this, the definition of DBS proposed by Bharadwaj et al. (2013) puts creating value at the core of DBS. The author therefore inferred that if a company has a clearly defined DBS, it must be outlined in the integrated report of the company. In the interest of ensuring that interviews are productive and relevant, the author proposed that the sample frame be narrowed down to include only listed organisations on a stock exchange. This qualifying criterion gave the author the opportunity to screen firms prior to the interview and identify various companies that had a clearly defined DBSs to approach for interviews.

Non-probability sampling is a suitable sampling method when no statistical inferences will be made from the sample set (Saunders et al., 2008). A purposive or judgemental sampling technique was used to ensure that only individuals in executive positions at organisations that have a clearly defined DBS were chosen. By selecting a homogenous sample of firms within the same industry, the author could identify common factors that led to isomorphic behaviour between different firms' DBS.

The author approached CIOs, consultants familiar with digital business strategy implementation and executive management involved in the DBS. This included non-IT managers, since a fusion between business strategy and IT strategy does not necessarily mean that the traditional IT department is responsible for the design of DBS (Mithas & Lucas, 2010). These individuals were interviewed to better understand the pressures that lead to isomorphism of the DBS.

Sample size in qualitative research studies where non-probabilistic purposive sampling is applied can be defined as the number of interviews required to achieve saturation. According to Guest, Bunce, and Johnson (2006), saturation is reached when no new themes or information is observed in the data. Factors that influence saturation include: (1) interview structure, (2) content and (3) participation homogeneity (Guest et al., 2006).

Guest et al. (2006) relate that if a similar set of questions (interview structure) are asked to interviewees, saturation will be achieved sooner. In this research study, semi-structured interviews were performed using the same set of interview questions for all participants.

Guest et al. (2006) go on to define content as the distribution of domain knowledge among participants and infer that if more participants are knowledgeable in the domain, saturation will be achieved sooner. Participants were chosen due to their high level of domain knowledge as CIOs and executives.

Participation homogeneity refers to the level of homogeneity among the interviewees; the more similar participants are, the sooner saturation will be achieved (Guest et al., 2006). A homogenous group of executives consisting mainly of CIOs were interviewed.

Given the abovementioned factors, the minimum recommended number of interviews at which saturation is achieved is 12 (Guest et al., 2006). Table 1 provides detail on the 16 interviews performed and their corresponding duration as well as the designation of the interviewee and type of firms covered during the data collection phase.

Table 1 Interview Schedule

#	**Interviewee Designation**	**Type of Firm**	**Interview Duration**
1	Consultant	Banking	0 hrs 55 mins
2	CIO	Automotive credit provider	0 hrs 32 mins
3	IT Manager	Equities indexing	0 hrs 58 mins
4	CIO	Insurance and investment group	2 hrs 30 mins
5	Consultant	Investment and business banking	1 hrs 17 mins
6	CEO	Retail bank	Email
7	CIO	Insurance provider	0 hrs 41 mins
8	CIO	Investment bank	0 hrs 38 mins
9	CIO	Insurance broking and risk management	0 hrs 40 mins
10	Equity Analyst: Retail Banking	Retail banking	0 hrs 35 mins
11	CIO	Investment and retail banking	0 hrs 37 mins
12	CIO	Investment banking	0 hrs 38 mins
13	CTO	Retail banking	0 hrs 28 mins
14	CIO	Credit provider	0 hrs 38 mins

15	CIO	Retail and investment banking	0 hrs 46 mins
16	CIO	Retail banking and insurance provider	0 hrs 30 mins

Saturation was assessed based on the number of participants that independently expressed the same code. This is a better indication of thematic importance than the absolute frequency of which a theme is expressed (Guest et al., 2006). No new codes were identified after eight interviews as displayed in Figure 2.

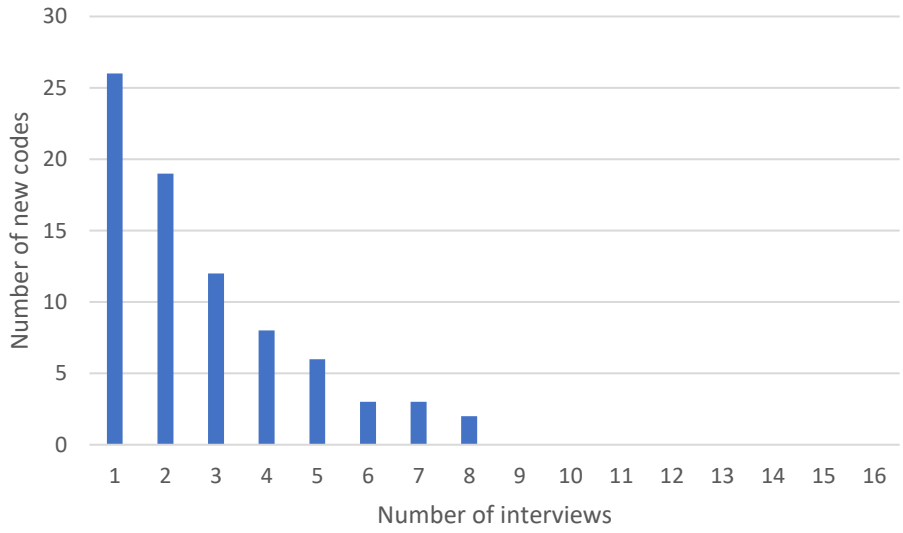

Figure 2 Saturation

5.5 Unit of Analysis

The unit of analysis comprised Executive Managers' view of the DBS of the firm in the financial services industry.

5.6 Data Collection

The primary method of data collection constituted semi-structured interviews. Semi-structured interviews complemented the descriptive nature of the study (Saunders et al., 2008). The author wished to use this instrument to ensure that a certain structure was given to the interview to derive relevant answers pertaining to the research propositions but also to ensure that the interviewee was not limited in their answers. This instrument allowed the interviewee to elaborate and the author could gain insights that contributed to the identification of current trends. The use of in-depth interviews provided flexibility in that executive availability could be navigated by also using

different modes of communication, such as telephonic and email (Saunders et al., 2008). This also increased the number of interviews the researcher was able to complete.

The authors ensured proper preparation by compiling interview questions from concepts and gaps identified in an in-depth literature review. Interviews were recorded with the permission of the interviewee and transcribed later as to not distract the interviewer nor the interviewee. These transcripts were shared with the interviewee as part of the member check process to ensure that the interviewee's correct meaning was captured in the transcript.

5.7 Data Analysis

The authors performed a thematic analysis of the transcribed interviews as it provides an entry into qualitative research, "which might seem vague, mystifying, conceptually challenging and overly complex" (Braun & Clarke, 2012, p. 58). Thematic analysis is defined as an exploration of themes that are key to the description of a phenomenon. It is a form of pattern identification where themes become categories for analysis (Fereday & Muir-Cochrane, 2006). A deductive approach provides the study with an initial set of themes which were tested for reliability during pilot interviews and used to develop a code manual (Fereday & Muir-Cochrane, 2006).

The author followed the following six steps in performing a thematic analysis:

Step 1: The author acquainted herself with the data by manually transcribing all recorded interviews herself.

Step 2: When performing thematic analysis, deduction entails the top-down approach whereby a series of concepts, topics and ideas are brought to the table and used to code and interpret data (Braun & Clarke, 2012). Thus, the author extracted initial codes from the literature and combined these into a code manual. The code manual grouped codes together based on the following themes: the design component to which they belonged, the type of isomorphism, differentiators, industry-led characteristics, minimum requirements, interoperability and data pooling.

Step 3: The author reviewed the candidate themes and code manual.

Step 4: The transcripts were analysed using the code manual. The author made use of Atlas.ti™ to perform the analysis. Data were categorised as interviews were completed and until coding saturation had been reached.

Step 5: Once all interviews had been transcribed, coded and saturation had been reached, the frequency of code occurrence was analysed to determine which design components manifested because of the DBS.

Step 6: Once these components had been identified, the author could recognise which components were most frequently mentioned between interviews. This gave an indication of which components were common across the industry.

Step 7: The author then analysed code co-occurrences to establish which components were considered to add differential value, which codes were minimum requirements for a DBS and which components the industry leads were considered to have successfully implemented.

Step 8: The author analysed code co-occurrences to establish which isomorphic pressures led to the implementation of certain design components.

Step 9: The codes co-occurring with the code “interoperability and data pooling” were analysed to determine what design components were typically implemented to facilitate interoperability and data pooling.

Step 10: A matrix was constructed to better visualise the findings.

6 Limitations and Trustworthiness

The rigour of qualitative research studies can be established by means of trustworthiness. A key dimension of trustworthiness is comprised in credibility and confirmability (Shenton, 2004).

Credibility speaks to the congruency of the research findings with reality. Credibility can be established by developing early familiarity with the case, random sampling, triangulation, ensuring honesty of informants, negative case analysis and member checks (Shenton, 2004).

Familiarity with the Case

The author reviewed all prospective company annual reports before the interviews to familiarise herself with the organisations.

Triangulation

Triangulation was applied in the sense that a wide range of informants were interviewed, which consisted of CIOs and other executives within various organisations.

Informant Honesty

Informant honesty was preserved by providing the informant with the opportunity to refuse participation so that only willing informants were interviewed. Informants were further asked to be frank in answering all interview questions.

Member Checks

To further establish credibility, the author made use of member checks. Kornbluh (2015) describes member checks as checks used under the assumption that researchers are easily influenced and might be biased toward a certain research outcome. She further states that member checks entail having the interviewee check the transcripts and inferences made from these transcripts to verify that it reflects the intended meaning. It further ensures the researcher's ethical role in reflecting how the participants' lived experiences are portrayed (Kornbluh, 2015). All interviewees were given the opportunity to review the transcripts of the interviews and provide feedback if they felt that their opinions had been portrayed erroneously or out of context.

Pilot Interviews

Confirmability shows that the findings originated from the data (Shenton, 2004). The author addressed the confirmability of the instrument by conducting at least three pilot interviews. Pilot interviews provide an opportunity for the interview protocol and procedures to be refined to ensure that the data are consistent with the research objectives (Zsidisin et al., 2005).

The draft version of the informed consent letter with the interview brief and interview questions used can be found in Appendix A and Appendix B respectively.

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Appendix A. Informed Consent Letter

This study covers Digital Business Strategies in the financial services industry. The researcher's aim is to describe the different design components of a DBS and the rationale behind the adoption thereof. Further to this, the researcher would like to discuss which design components are necessary to facilitate interoperability, leverage network effects and information pooling and which design components provide the business with differential value.

Participants will be asked to share their honest views with the researcher and venture a view on the Digital Business Strategies of their competitors.

The researcher is a part-time student at the Gordon Institute of Business Science and does not work nor is affiliated with any organisation in the financial services industry.

Participants can choose to complete the interview either via telephone or in a face-to-face meeting. The interview is expected to last about an hour.

Your participation is voluntary and you can withdraw at any time without penalty. All data will be reported without identifiers.

If you have any concerns, please contact the researcher or the research supervisor. Contact details provided below.

Researcher: Naömi Bloem Pr.Eng	Research Supervisor: Prof. Louise Whittaker
Email: 26049342@mygibs.co.za	Email: whittakerl@mygibs.co.za
Phone: 072 508 97 91	Phone:

Signature of participant	Signature of researcher
Date:	Date:

Appendix B. Draft discussion guide

#	Interview Questions
1	Tell me about your DBS. - Probe to identify the design components of the DBS. - How did you formulate it? (Organisational changes / Exogenous factors (Rajagopalan & Spreitzer, 1997)) - What components of the business did you have to change? (Business model components (Kahre et al., 2017; Rajagopalan & Spreitzer, 1997))
2	Why did you formulate the DBS as such? - Address all components listed.
3	What facilitates interoperability between firms? (Design components)
4	What facilitates information pooling between firms? (Design components)
5	Is interoperability and information pooling a necessity to do business?
6	What do you consider as minimum requirements / hygiene factors of a DBS?
7	What DBS components add differential value to your business?
8	Tell me about your perception of industry leaders' DBS.

Appendix C. Author guidelines Information Systems Journal

1. GENERAL

The *Information Systems Journal* is an international journal promoting the study of, and interest in, information systems. Articles are welcome on research, practice, experience, current issues and debates. The ISJ encourages submissions that reflect the wide and interdisciplinary nature of the subject and articles that integrate technological disciplines with social, contextual and management issues, based on research using appropriate research methods.

The ISJ has particularly built its reputation by publishing qualitative research and it continues to welcome such papers. Quantitative research papers are also welcome but they need to emphasise the context of the research and the theoretical and practical implications of their findings. The ISJ does not publish purely technical papers.

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Reviewers receive feedback (all reviews) after the paper has been processed, including names of authors, if the paper is accepted. No charges are made for submissions nor fees paid to reviewers. To allow double-blinded review, please submit your main manuscript and title page as separate files.

3.2. Suggest a Reviewer

Authors may, if they wish, suggest the name and current email address of one potential reviewer whom you consider capable of reviewing your manuscript, that has the necessary credibility, and that does not represent a conflict of interest. The editors reserve the right to decide whether to use the suggested reviewer or not. If used the editors may additionally choose one or two other reviewers.

3.3. Manuscript Status

After submission you will receive an email to confirm receipt of your manuscript within a few days. Subsequent enquiries concerning paper progress should be made to the editorial office, Kevin Floresat ISJadmin@wiley.com.

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Authors should submit articles based on research, practice, experience, current issues and debates. The ISJ encourages submissions that reflect the wide and interdisciplinary nature of the subject and articles that integrate technological disciplines with social, contextual and management issues, based on research using appropriate research methods.

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4.1 Paper types

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A Research Article is a regular article based on empirical research that is written by the researchers who did the research. Research Articles must be original and make a sufficiently significant contribution to warrant publication. Research Articles must normally reference theory, whether through validating, building, challenging, refuting or refining one or more theories. Research Articles may employ one or many methods. Researchers should specify their epistemological and ontological stance in the article. Research Articles must be explicitly linked to research about information systems in a specific and identifiable context. Normally a Research Article should not exceed 10,000 words of main text (excluding references and appendices). The vast majority of articles submitted to and published by the ISJ are Research Articles.

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a regular research article, we would expect to see less emphasis on the theoretical underpinnings and contribution of the research, but more emphasis on the practical value of the research findings. Practitioner insights into what works and why it works are particularly valuable and have the potential to demonstrate a high degree of impact.

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A Research Commentary is a short article (max 3000 words) in which authors analyse one or more published ISJ articles. Such a commentary would normally need to make a significant contribution to knowledge by engaging in a critical evaluation or otherwise elaborating specific issues that the original authors did not consider. All Research Commentaries will be screened by an Editor and a Senior Editor before being sent for review. If a Research Commentary is accepted for publication, then the authors of the original article(s) that is/are the focus of the commentary will be invited to write a brief response (max 500 words). However, no further correspondence or publication will be entertained beyond this response.

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Author biographies: A biography for each author of about 100-200 words should be supplied as a separate file, including email addresses of all authors.

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Appendix D. Example article from Information Systems Journal

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SPECIAL ISSUE PAPER

Digital transformation by SME entrepreneurs: A capability perspective

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Abstract

This research investigates how entrepreneurs of small and medium enterprises (SMEs) with inadequate capabilities and limited resources drove digital transformation in their companies, a phenomenon that remains under-researched in the extant literature. We conduct qualitative research on digital transformation to cross-border e-commerce undergone by 7 SMEs on the Alibaba digital platform. We inductively derive a process model that aims to describe and explain how SME entrepreneurs, with support from the digital platform service provider, drive digital transformation through managerial cognition renewal, managerial social capital development, business team building, and organizational capability building. This model expands our understanding of both digital entrepreneurship and digital transformation. It also presents new insights into how digital platform service providers can help SMEs transform and compete.

KEYWORDS

digital entrepreneurship, digital platform, digital transformation, dynamic managerial capabilities, organizational capabilities, process model

1 | INTRODUCTION

As information technologies (IT) have become "one of the threads from which the fabric of organization is now woven" (Zammuto, Griffith, Majchrzak, Dougherty, & Faraj, 2007, p. 750), the role IT can play in organizational transformation has drawn much research effort (e.g., Ash & Burn, 2003; Besson & Rowe, 2012; Daniel & Wilson, 2003; Lucas, Agarwal, Clemons, El Sawy, & Weber, 2013; Pan, Pan, & Devadoss, 2008). Earlier research focused more on

