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BUSINESS MODEL TRANSFORMATION: IDENTIFYING THE CHALLENGES OF TRANSITIONING FROM PIPES TO PLATFORMS

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ABSTRACT

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Business models illustrate the narrative of how firms create, deliver and capture value. Consistent revision, and if required complete transformation of an organization's business model is essential if such an organization wishes to remain sustainable and competitive in today's volatile marketplace. Yet, presented with the knowledge of the immense benefits of transitioning to a new business model (platforms), organizations still stick to their old and redundant traditional models of business (pipes). This paper sought to identify the impediments/barriers of undertaking and implementing successful business model change in organizations. While previous research has examined enablers of business model transformation, there is little study aimed at identifying and establishing an understanding of the challenges that hinder firms from transforming their business models. Drawn from an in-depth single case study of a Nigerian firm, this paper explores the challenges firms are faced with in the process of undertaking business model change. We equally explore how the identified challenges may be mitigated.

Findings from empirical data gathered suggest that the barriers to successful business model change are linked to the general complexity associated with the business model concept, structure and culture of the organization and the role of leadership and management know-how in the management of change processes.

Keywords: Business Models, Business model transformation, pipes, platforms

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1 INTRODUCTION

The increasing momentum and growing popularity of the business model concept in both academia and in business circles is proof of the growing challenges that organizations face in today's volatile and dynamic business environments. As has been recognized by research, a significant number of firms have learnt to leverage on opportunities via the implementation of novel ways of running their business. With entire business industry sectors facing decline as a result of market environment constrains, there is as a matter of urgency that organizations need to adopt new ways of making fundamental strategy shifts, producing innovative products or services, and reconfiguring their assets. In a nutshell, there is need that organizations change their business models. Shapiro et al (1999) points out that it has become pertinent that organizations begin to learn the rules for a platform driven world else they start planning for their exit. As market rules and the global economy have become radically dynamic, firms are obliged to keep up with the change if they are to survive

Platform business models in recent times have not only proliferated the business world but have also gained relevance in academia. With business connections becoming more digital and organizations seeking to become leaner via the delivery of highest value to customers, while consequently mitigating waste, the adoption of platforms as a dominant business model cannot be overemphasized.

The platform approach provides an avenue for organizations to build ventures that use customers as both users and providers, thus leveraging on the ideals of collaborative or the sharing economy. Firms that have consistently ranked in the top global earners as well as those cited as having radically disrupted their market industries share a similar commonality: they are arranged around platforms. The platform business model holds the potential to reshape industries into interconnected ecosystems that radically alter traditional rules of competitiveness and innovation. Certain large firms across industry clusters are leveraging on the potential of platforms strategies to deliver dynamic products, radical services and unparalleled customer experience.

Business model transformation or business model change, specifically moving from traditional business models (pipelines) to platform driven models has been cited as one of the most disruptive ways via which organizations can scale on resources, take advantage of dormant assets and exploit volatile market environments (Shapiro et al., 1999; Choudry et al., 2016).

Given all the potentials attributed to the adoption of the platform business model when compared to traditional business models or pipelines, it becomes surprising why numerous firms are yet to switch to what economist are terming as the fourth industrial revolution. What inhibits a shift from pipes to platforms? In other words what challenges are extant in business model transformations or business model change?

1.1 Keywords and definitions

Business models: an articulation of an organization's value proposition, market sector identification and revenue generation mechanisms, value chain structure definition, cost structure and profit potential estimation, description of firm position within its value network, and formulation of competitive strategy.

Business model change: a switch, revision or redesign in the perceived logic of the way and manner via which value is created by firms

Platform business models: A platform is a business model that creates value by facilitating exchanges between two or more interdependent groups, usually consumers and producers.

1.2 Research objective

Business focused transformations or innovation has today become a characteristic of the modern economy (Pisano, 2015). In modern organizational settings and in this age of the business revolutions, change is no longer considered as simply being an incremental continuous process but rather a seditious and abrupt phenomenon (Hamel & Ruben, 2000). With factors such as globalization and technological advancements being accountable for numerous change processes, organizations are consistently seeking new and innovative ways to exploit volatile market environments (Voelpel et al, 2004). While there is a rising need for organizations to respond to rising customer needs by rapidly transforming their business models, it has been noted that change does create uncertainties that may impact organizational structure, culture and even performance.

In light of the fact that business model transformation is considered a novel and even paramount process, researchers have increasingly become interested in the barriers or challenges that inhibit firms from undertaking business model change (Cavalcante et al, 2011). While not all business model transformations may lead to outcomes that are considered innovative, several research studies have often cited the transformation or change of an organization's business model as a dichotomy (either innovation is achieved or not) thus failing to grasp the complex and dynamic nature of business model transformation (Koen et al, 2011).

Acknowledging the varying degrees of novelty in any business model change process in implicative of the notion that the challenges associated with such change processes are not of similar nature. This bags the question: *is there a possibility of identifying any specific set of barriers/challenges of business model transformation and what are the nature of such identified barriers?*

These questions represent the core of the debate within this study and it has become quite relevant that these questions be answered as there is significantly limited empirical evidence and research studies aimed at this argument. As at the time of this study, related topics within mainstream literature are quite few and only describe the hurdles encountered by organizations during the process of business model innovation (Taran et al., 2016; Frankenberger et al., 2013). While an understanding of such hurdles might be a good starting point for this particular study, there is still very little in mainstream academia that investigates what stops organizations from undertaking business model change. Furthermore, very few attempts have also been made as regards providing a taxonomy or classification of identified challenges. Academic studies so far have only offered some basic insight on the outlined phenomena (Casadeus-Masanell & Ricart, 2010), however the insights provided within those studies leaves unanswered questions.

The repercussions of the inadequacy of knowledge as to what factors inhibit the undertaking of business model transformation amongst organizations can be highlighted in two varying forms.

Firstly, the inadequacy of comprehensive knowledge of the barriers of business model change promotes a trial and error approach to the change process. Numerous studies on the subject matter have stressed that business model transformation could be achieved via experimentations (Sonsa et al, 2010; Amit & Zott, 2001; Sinfield et al. 2012). Even in a study conducted by Chesbrough (2010), the author claimed that the way to propagate business model innovation was through consistent experimentation regardless of the nature of challenges that were encountered. While this notion or approach might be applicable in situation where knowledge is inadequate or insufficient, it should be noted that emphasis on the trial and error approach to business model change would lead to major drawbacks such as succession of incremental experiments that would take up time and valuable resources. Research should aim to provide empirical evidence that drives sound and strategic decision making since the key essence of business model change are trade-offs and fit. Organizations who aspire to transform their business model want to start on the right foot and then subsequently adjust processes of actions in due time and if such adjustments are deemed necessary.

Secondly, inadequate knowledge of the inhibitors of business model change holds significant potential of diminishing confidence to embark of business model change driven projects. In light of the fact that it is impossible to predict uncertainties and challenges that might be encountered in the future, we claim within this study that nonetheless, being equipped with insufficient knowledge and overview of the typical issues that characterize business model transformation facilitates severe lack of confidence among stakeholders and partners to be engaged in the change process. Empirical evidence of challenges would definitely address this and aid all parties to be involved come up with more strategic and customized solutions to the change process. Furthermore, the synergies that would be established by being aware of the challenges ahead would instill confidence across the organization and thus mitigate the risk of missing potential use of available technology and other resources that do not fit within the current business model (Chesbrough, 2010).

As has been identified above, the knowledge of the challenges that hinder business model transformation, particularly when moving from pipelines to platforms, is significantly fragmented and the phenomenon under-investigated within academic literature. In addition, the nature of these challenges remains unclarified. As such, clarification of the concepts and nature of such challenges is required to consolidate differing viewpoints into a framework that propagates insights of the inhibitors in the context of business model transformation. This thesis aims to make this contribution, thus the guiding research questions that lays a foundation for this study are:

RQ1: ***"How is the business model construct understood by executives?"***

RQ2. "***What challenges do firms encounter when transitioning or adopting the platform business model?"***

RQ2**.** "***How can the challenges identified in the above research question be mitigated?"***

1.3 Aims and contributions

The goal of this thesis is to garner better understanding via empirical evidence of the most occurring challenges that inhibit business model transformation. Undertaking this study requires that certain concepts be analyzed. What exactly is a platform? Why has it become so relevant? What are business models and how do they fit within the contexts of organizations. In addition, this study requires a conceptual framework aimed at guiding the study.

By answering the above-mentioned questions, this study aims to provides relevant insights on the elements that hinder organizations from undertaking business model change. More significantly, this study could be of importance to practitioners as well as the field of business model research in the following ways:

- Empirical evidence gathered during the course of investigation could be of immense benefit to organizations and their stakeholders, who are often overwhelmed and hesitant to undertake a change in their business model given the inadequacy of knowledge of this phenomenon. Research has proved that organizations are consistently seeking guidance on how to transform or innovate their business models (IBM Global CEO Studies, 2008; Casadesus-Masanell & Ricart, 2010). As such, identifying the challenges involved in the change of business models and how these challenges affect the change process will to a significant degree instill confidence in organizations and thus equally propel stakeholders to embark on business model change initiatives that would have otherwise been rejected or stalled.
- While a number of studies emphasize that business model transformation has little to do with superior foresight on the part of the organization and more to do with the experimentation (trial and error approach) and some form of adaptation (Chesbrough, 2010; Sonsa et al, 2010) this study holds the notion that such an emphasis or approach may often go contrary to the traditional configurations of the assets of the organization, as stakeholders within the firms may resist experiments that establish high levels of uncertainties and challenge their status within the organization. Empirically validated knowledge on the nature of the challenges to be faced when transitioning to a new business model provides significant potential for stakeholders to evaluate more confidently, what business model transformation initiatives to undertake and which to reject.

1.4 Layout of thesis

This thesis is laid out in the following order:

Chapter 2, *the literature review,* serves to introduce audiences of this study to the business model construct and its underlying concepts. It delves into an exploratory analysis of what business models are and moves on to defining platforms via the use of academic focused literature.

Chapter 3, which is a continuation of the literature review focuses on business model change, it's relevance and dynamics and then looks at how businesses transition from pipes to platforms. Particularly, this chapter investigates the challenges of business model change and provides a framework for categorizing identified challenges.

Chapter 4, *Research Methodology*, highlights a detailed explanation of the approach and strategies adopted in the course of this study, including all research methodologies and corresponding implications.

Chapter 5, *Empirical data*, discusses data collected. Within this chapter of the thesis, we discuss experiences and insights gathered from respondents in a bid to establish as well as develop an empirical foundation for critical analysis in the preceding chapters.

Chapter 6, *Findings and discussion,* focuses on the analysis and breakdown of the most significant findings that was gathered during empirical investigation.

Chapter 7, *Conclusions,* this chapter closes with final remarks on what has been found and recommendations for stakeholders.

2 LITERATURE REVIEW

This chapter critically reviews literature from the domain of business models, platform business models and business model change. The aim of this is to establish an understanding of the concept of business models thus allowing for the exploration of the underlying challenges inherent in transitioning from a traditional/pipe business model to a platform-oriented business model.

2.1 Business models

Business models as a term or concept is used extensively across literature that focus on diverse disciplines. However, the meanings ascribed to the term largely stem from e-business contexts and though the business model concept poses significant relevance to all firms and more recently, academia, there seems to be no large scale or systematic study on the topic. However, several authors have tried to provide useful definitions, frameworks and analysis of the concept. These definitions, frameworks and analysis are then often used as a means of exploring the determinants of organizational business processes, strategy and performance. In this section of the paper, an analysis and exploration into the understanding of the business model term and concept is undertaken.

The mutual understanding of the concept of business models and what they comprise till date has not been well established. The rise in business model related literature corresponds with the subsequent IT bubble witnessed in the last century. The business model phenomenon has become an acknowledged research stream within the information systems discipline as is with many other disciplines, and though it is seen as a significant and topical research theme, there still remains little or no unison in the definitions of the term "business model". While there have been several propositions and definitions of the business model term, several scholars have found in their studies that current business model constructs might be misleading in light of the fact that they do not meet taxonomical criteria (Amit and Zoth, 2001).

Nonetheless, the business model term has evolved into a focal and prevalent concept for business processes and strategy. Innovative business models are consistently emerging and existing literature on the business model concept point to the notion that a focus on processes, strategy and system activities can be both unifying in further expanding on the understanding of the business model construct (McGrath, 2010). Business models have existed in the past, however the term gained momentum with the advent of the World Wide Web as well as the continuing momentum of digital technology and market environment volatility (Teece, 2010). A core definition of the business model concept as postulated by Amit and Zoth (2001, p. 219) who are representative business model scholars depict business models as “the content, structure, and governance of transactions designed so as to create value via the exploitation of business opportunities”. According to their study, the business model represents a construct that aims to describe how firms operate and create value via the exploitation of a system of transactions. In their analysis of the business model, value is created via four mutually dependent paradigms: efficiency, lock-in, complementarities and novelty. They emphasize that consistent use of the business model terminology is crucial in a search for mutual insights and understanding in how the business model construct is approached. Furthermore, Amit and Zoth emphasize that good business model performance can both facilitate businesses in creating better opportunities and outperforming competitors. Business models are perceived as being the locus of innovative initiatives which is why the authors propose a meta-business model that focuses on value creation and exploitation.

Business models may be equally conceptualized as a set of transactions, a methodical set of business centered activities or an activity system that is made up of business components, organizational dynamics and the linkages between these components and dynamics (Afuah & Tucci, 2000, p.168). Business models encompass the various activities performed by a firm to deliver some sort of value to its clients. Eisenmann et al (2001) accentuate that the business model concept refers to the various services that are provided to customers and the accompanying activities executed in delivering those services. Chesbrough & Rosenbloom (2002) contemplate that the business model serves as a mediation between technological inputs and economic outputs. What is generally agreed upon within key literature on business models, is that they either unambiguously or implicitly support business activity system viewpoints or perspectives (Afuah & Tucci, 2000).

Amit & Zott (2008) stress that the business model concept may be perceived as a structural template that aids to describe the organization of a firm’s focal transactions with all of its external constituents within market environments. This analysis as denoted by the authors accentuates the notion that business models comprise of four key parameters; relationships, resources, offerings and revenue models. The authors conceptualize the business model construct as a framework of relative interdependent activities that aim to transcend the focal firm and extend beyond the firm’s boundaries. From the point of view of Zoth & Amit (2008), existing literature on business models tend to lean towards support for system activity perspectives. Within existing literature on the business model construct, scholars continue to define the business model as “a statement”, “ a set”, “a structural template”, “a description”, “a conceptual framework or tool”, and even “a pattern” ((Amit & Zott, 2001; Chesbrough & Rosenbloom, 2002; Johnson et al., 2008; Teece, 2010; Casadesus-Masanell & Ricart, 2010; Wirtz et al., 2010; Amit et al., 2011). Other scholars have deemed it imperative that the business model construct may only be truly defined via its underlying components (Osterwalder et al., 2005, Sosna et al., 2010). However, one thing most of the literature across various disciplines agree on is that the overall objective of business models is to create value for all entities involved.

One of the major functions of the business model is to initiate, develop and design promising business concepts and constructs in addition to being a tool or framework that facilitates sharing, development and management of the business (Ostwerwalder, 2005). In essence a business model is perceived as an ideal business story that aims to answer basic questions about business ventures such as; what is your customer segment? What is the business' value proposition? What resources are needed to create value? How does the business generate revenue? Who are ideal partners? (Magretta, 2002). These constructs of the business model phenomenon to a certain degree point to the fact that the business model is an embodiment of the organizational and financial architecture of any venture. Ostwerwalder & Pigneur (2010) further define the business model as the rationale of how organizations create, deliver and capture value. The authors' business model ontology identifies with nine core components (customer segmentation, customer relationships, revenue streams, key activities, key partners, value proposition, key resources, channels and cost structures) which come together to produce an approximation to a holistic view on business structure of an organization.

Chesbrough & Rosenbloom (2002) on another note emphasize the notion of the business model concept as a mediating construct that ties technology and economic value together, thus enabling firms to leverage on technological input. An analysis of the Chesbrough & Rosenbloom perspective of business models expatiates on the idea that business models are significant in the capitalization of innovation and business strategy. Their analysis is detailed and divided into six core components that propose the core purpose of the business model to include: articulation of the venture's value proposition, market sector identification and revenue generation mechanisms, value chain structure definition, cost structure and profit potential estimation, description of firm position within its value network, and formulation of competitive strategy. This detailed approach in analysis of the business model construct represents an interpretation of how technology is perceived as being initially latent but immensely valuable when commercialized via the process of business model implementation. For a business venture to be conceived as successful and profitable, it is imperative that firms consider and view value creation processes as an opportunity to create new and innovative businesses via the use of ideal business model implementation. Rather than reject technology that fails to align with business model parameters, firms should seek to propose alternative business models that would adequately align with their existing technology. This notion is strongly reflected in the Chesbrough & Rosenbloom ideology of the significance in understanding the cognitive role of the firm and the importance of business models in articulating business logic. In their words, the authors stress that business models emphasize the relevance of understanding the process of value creation within an organization.

Teece (2010) further purports that business models aim to articulate business logic, provide data and evidences that establish that value is created and delivered to target consumers. While Teece (2010) highlights that cost, profit and revenue frameworks associated with the creation and delivery of value to customers are outlined within the business model, it is in no way a financial model of a business venture. Rather it is a conceptual tool for understanding the logic of the entire business.

Santos et al (2009) provide another critical analysis of the business model by depicting the concept as a configuration of activities and consolidation of organizational entities that perform business related activities both externally and within the firm in a bid to create value in production and delivery of specific product set or services. Their view of the business model lays emphasis on both the theme of activity configuration and the significance of fit between organizational units, as well as internal and external relational linkages that are deemed relevant for the success of business ventures.

Linder &Cantrell (2000) in their study approach the business model paradigm from a cognitive point of view. They highlight the purpose of the business model as being a conceptual tool for the recognition and understanding of the core lucidity of a business venture. Proposed within their study is the notion that business models possess a dynamic attribute. This implies that business models can be altered fluidly without significant effect to organizational structure. They further emphasize that ideal business models are not embedded in organizational structures, rather they are simply organizational mind sets. Business models are not simply perceived theoretical concepts, rather they are tacit understandings of how a business venture or organization is linked via various dynamic units which when combined creates value (Linder & Cantrell, 2002).

One key misconception about the business model is that certain literature outside of the information systems discipline lay claim to a fact that the business model is synonymous to strategy. This stems from the realization that in competitive business-related situations, there is a one to one mapping between strategy and the business model concept, thus making it rather difficult to differentiate between both constructs. However, an analysis of the business model undertaken by Shafer, Smith & Linder (2005) lean towards the viewpoint that, opposed to being synonymous to strategy, the business model rather embodies a set of choices, as well as outlines the schemes and logic of an organization via testing, analysis and validation. Put succinctly, strategy points to the choice of business processes and frameworks employed by firms to compete within market environments. The business model on the other hand tells the story of how the firm operates in its bid to create value for its target customers (Magrretta, 2002). As one author simply puts it:

“it is the business model that defines company strategy and not the other way around” (Chesbrough, 2010) (354).

The strength and dynamism of an ideal business model to an organization cannot be overemphasized. As Chesnrough (2010) stresses, the strength, foundation and innovativeness of a firm’s business model determines the product or service value of that specific organization. Even Zoth & Amit (2007) arrived at the same conclusion after a research study on performance implications of business model on business ventures. They stressed that a firm’s business model is just as significant as the firm’s ideas and technology. This particularly led the authors to deduce that the business model is a primary source of value and thus the authors acknowledge the fact that it is the value creation facilitated by an ideal business model that thus allows certain firms to outperform competitors within the same market environment.

The many varieties of analysis and definitions of the business model construct incurs fundamental barriers to the underlying nature and understanding of the concept itself. The varieties in definition of the business model concept equally pose significant drawbacks to understanding what makes an ideal or a prosperous business model. Furthermore, the non-unison in the definition of the business model concept amongst scholars has created an issue in separating concepts such as organization initiatives and strategy which have been used interchangeably in many analyses of the business model. As a construct, the business model ideology lies relatively at both theoretical and conceptual levels of processes, system activities and strategy. The business model construct does share some abstractions with entities of organization business strategy and depicts organizational ventures as a manifestation of the venture’s strategy and modularity of business-related activities and processes that are regularly executed in the delivery of some form of value. After a critical review of the analysis postulated by scholars on the business model concept, three themes of business model definitions can be deduced. The first theme encompasses definitions that reflect resource-based view of the business model which emphasize on entities such as resource and asset paradigms of the business model. The second theme boarders on the potterian value chain point of view of the business model which emphasizes that business models comprise of value streams. The third theme deduced is centered on the architectural framework of the business model which highlights key components of the business model as its definitive factors.

The business model concept can be said to be closely related to many managerial constructs, one of such constructs being strategy. However, it is largely distinct from such concepts. The business model nonetheless emanates from numerous facets of central ideologies of business strategy and the theoretical traditions that are linked to it. The business model is considered an interpretation or representation of an architectural framework design that aims to enable the concept of value creation. It encompasses organizational decision variables, resource flows, knowledge management, logistical streams, resource flows, administrative processes and service delivery initiatives. On a deeper level of analysis, the business model emphasizes value creation infrastructure, revenue logic, market positioning, and growth opportunities.

Business models are perceived as illustrations of organizational narratives. They highlight the stories that explain how organizational ventures operate but more importantly they represent planning apparatuses that aid in the linking of the numerous pieces of the business so as to establish a viable unison between these business elements. Business models are core logic for creating value within organizations. From a Porterian value chain perspective, the business model serves as a structural framework for information, product or service flows. Within this view point, the business model is also a representative embodiment that describes all the business actors, their specific roles, potential benefits for these business actors as well as a description for the venture’s revenue logic.

Looking at the business model concept form another perspective, it can be said to be an extension of the strategic network of organizational resources. The business model construct view point of these inter-organizational cooperative arrangements identifies firm resources as essential elements to the organization’s ability to create transactions that are deemed profitable. One could argue that an ideal business model must transcend the notion of being simply a logical and innovative way of executing activities related to a business venture. An ideal business model must imperatively meet specific customer needs to a high degree, be profoundly difficult to imitate for competitors and be able to drive incorporation of both internal and external elements associated with the venture’s creation of value.

2.2 Platforms and platform business models

Traditional business models otherwise known as pipes have over the years been the dominant model of business adopted by majority of organizations. Firms produce goods and services and push them out till they get to the final consumers. The pipe model of business employs an ideology that value is produced upstream and then consumed downstream thus resembling a linear flow quite similar to water flowing through a pipe. Prior to the dawn of the internet, pipes were generally perceived as a widely employed approach to how organizations conducted and strategized business. Much of the service industry in the past ran on the pipe analogy. Take for instance the education industry where teachers push out knowledge to students who in return consume such knowledge.

Today, with the continued evolution of the digital technology, the global marketplace is beginning to see the significance of a new type of model of business: "The Platform business model." This section of this thesis aims to define and establish an understanding of what both a platform and a platform business model imply via the use of existing academic literature.

The ever-evolving role of information technology and its relationship to organizational architectures, processes and strategy has continued to create paradigm shifts within industries. Organizations have progressively transitioned from an emphasis on the design of information systems to the development of information technology facilitated processes and just more recently to the development of models of business that drive services via the use of digital platforms (Parker & Van Alystyne, 2005). Practitioners agree that while the attention for such models of business was initially geared towards the networked digital industry, the platform business model is being increasingly propagated across all major industries. The increased consumption of platform driven goods and services imperatively drives the stakes in the understanding of such models of business.

In a bid to both capture and understand the leveraging role of platforms in the emergence of firms that challenge and disrupt individual industry-sector established norms and rules, a critical view of the concept and construct of the platform term is required. With many perceived innovative firms being referred to or considered as being platform driven, a key question that is often asked is: what exactly is a platform? The answers often provided seem to be significantly poised towards the context via which the platform term is being used. Among the many pioneers of the platform concept were Cusumano & Nobeoka (1998) who described platforms as comprising a set of subsystems and interfaces. Robertson &Ulrich (1998) asserted that platforms are a collection of assets. Bresnahan & Greenstein (1999) stressed in their own study that platforms represent a bundle of standard components that link buyers and sellers. West (2000) claimed that the platform approach encompasses an architecture of inter-related standards that aim provide modular substitution of complementary assets such as software and hardware.

From a more generic understanding of the term, "platforms" are used to imply the notion of "a building block" usually a technology, a product or even a service that acts as the foundation upon which business activities, transactional processes or complementary initiatives (technology, products or services) could be developed (Gawer, 2009). Often conceptualized as multi-sided in nature, platforms mediate the technology paradigm via the use of varying business logics. To this effect, platforms are considered to consist of structures that serve as leverage or foundation through which firms may develop complementary products, services or technologies (Gawer, 2009).

Within the domains of research, the evolution of the platform concept may be traced back to the 1900s with the introduction of the term "product platforms."

The above term was used as a means of describing how firms achieved cost savings and efficiency as well as benefits via the adoption of internal modular architectures for their product development strategies and processes (Cusumano, 2010). Platforms were considered frameworks employed by firms to boost efficiency rates for design and creation of derivative products and services that shared similar structure (Gawer & Cusumano, 2013). In this light, platforms served as a foundation, a tool or framework through which a firm could effectively develop a variety of related products by the reuse of common components (Cusumano, 2010). Platforms generally adopt a non-traditional manner of business logic implementation and firm process. They are not subject to the traditional linear supply chains. Rather, they adopt an ecosystem paradigm that consist of a variety of dependencies (Parker & Van Alstyne, 2012).

Rochet and Tirole (2006) asset that the platform business concept is likely to involve transactions that are shaped by two sided markets that consist of rules and components, business ecosystems and network effects. The network effect mentioned in the Rochet and Tirole definition is conceived to emerge from the concept of transactions that occur from the coming together or interactions of two sides of the market to create value. Furthermore the authors emphasize that the resulting implication of such network effects is the creation of business ecosystems via which innovation is ensued. Their definition of the platform concept aligns with elements and sequential occurrence of transactions, network effects, business ecosystems as well as innovation.

The platform concept and its implementation as a model for business is currently a focal research theme in academia and has significant implications in the business world in light of the fact that they are rapidly evolving into a disruptive tool for business processes and strategy and a framework for the design and development of ecosystems that facilitate the convergence of demand and supply. Iansiti & Levien (2004) agree that the platform concept is emerging as an indispensable entity for the facilitation of competitive advantage of corporate ecosystems. They perceive platforms as a collection of solutions via access channels or interfaces that are linked to the challenges of entities belonging to an ecosystem. Thus they define the platform as a package via which keystones share value with their ecosystem.

Gawer & Cusumano (2008) in similar light accentuate that an understanding of the platform concept propagates the fact that it drives the participation of external players within the ecosystem to develop complementary goods, services or technologies grounded on integrated components and technologies. Iansiti & Levien (2004) defined the platform as a package via which organizations share value with entities within their ecosystems. Gawer & Henderson (2007) analyze platforms to be evolving technological systems that comprise of components or subsystems. One thing that was particularly common with the platform concept in the early days of its study is that a significant number of platform scholars came to the same conclusion that the platform was conceived to be a set of components, packages or subsystems that were integrated to create some form of value.

In recent times however, the platform concept has shifted from just being defined as simply sets of components to a more dynamic and well-structured ideology that highlights concepts of two or multi-sided markets, ecosystems and network effects. Parker &Van Alystyne (2005) as well as Rochet &Tirole (2003) all share this same ideology of the platform concept when they agree that platforms mediate two sided networks. On one side of the network termed as the demand side exist the “users or consumers” who derive or create value via the purchase or consumption of goods or services. On the other side of the divide exist the entities who offer platform complements. Digital platform-oriented firms encompass both a set of governing rules as well as a set of modular components that propagate transactions between the different sides (Boudreau &Hagui, 2009). While the modular components are organized within architectures that specify how the overall system fits, the set rules are aimed at determining to what degree interactive activities are coordinated in terms of policies that aid to constrain contracts, behavior, responsibilities and rights of participants. Eisenmann et al (2006) equally assert that platforms consist of rule sets and modular components as highlighted in several other literature. However, their study focused on the network effects that arise from platform transactions. Within most platforms according to their study, transactions and network effects are the elements that establish a business ecosystem. Eisenmann and his colleagues went on to expatiate that within these created business ecosystems, firms evolve their competencies and capabilities in a bid to develop new innovations. In essence, the platform approach highlights the notion that innovations do not succeed as a result of the efforts of one single firm, rather firms require complementary inputs to attract customers and create breakthrough innovations. Evans, Schmalensee & Hagju (2006) describe platforms as being the very core of business ecosystems that mainly consist of consumers and mutually independent business communities who possess a complimentary and symbiotic relationship with the platform. Their definition as well as the others reviewed within this thesis further propagate the notion that the nature of platforms as a model of business may be characterized by three core concepts: Multisided market structures, network effects and business ecosystems.

2.2.1 Characteristics of platforms

- Multi-sided nature of Platforms

The theoretical study of multi-sided markets came into prominence in the early 2000s (Rochet and Tirole, 2003a; Schiff, 2003; Rochet and Tirole, 2004; Wright, 2004; Evans and Schmalensee, 2005; Parker and Van Alstyne, 2005; Economides and Katsamakas, 2006; Eisenmann et al., 2006). The multi-sided nature of platforms is illustrative of an environment that is established to facilitate exchange of value among multiple group of participants such as suppliers, consumers and other business entities. Armstrong &Wright (2007) describes the multi-sided market as being one of the core theoretical concepts and systematic nature of the platform business model and define it as a conceptual space with multiple distinct stakeholders who aim to provide each other with network benefits. Evans & Schmalensee (2008) claim that a multi-sided market is a conceptual meeting place for a group of business intermediaries whose interactions are facilitated by the platform. Within multi-sided markets, conventional industrial theories do not necessarily hold. For any of the conventional paradigms of industrial theories to be applicable within multi-sided markets, such theories must first be modified to compensate for indirect network effects. Multi-sided markets are also characterized by value chains that are significantly different from those that exist in conventional market structures. As described by Eisenmann et al. (2006), in conventional markets, value flows from the left side to the right: to the right of the flow is cost and to the left is revenue. Value flow in multisided markets have both cost and revenue on both sides in light of the fact that platforms cater to distinct groups of users of each side.

- Network Effects

A general notion of the network effect concepts is highlighted in the fact that the larger the number of people who use a product or service the greater the perceived value of such a product or service is to each consumer. Industry sectors significantly affected and influenced by network configurations and network effects are those based on information and communications systems, however network effect can be seen in many other industries outside the technology sector. Dranove & Gandal (2005) accentuate that network effects may also refer to the effect one stakeholder has on the value of a particular service or product to other users, it may also refer to demand side economies of scale or network externalities. From a more general standpoint, network effects are demand economies of scale are necessarily imply that to a certain degree some form or level of interaction is established. Shapiro & Varian (1998) stress that in market environments where the network effect phenomenon is extant, the value of products or services is significantly dependent on the number of other users. Platforms have a large tendency to be considered more valuable as more users engage in the use of such platforms (Evans & Evans, 2016). Being a fundamental feature of platforms, several studies have referred to the network effect phenomena as an unofficial economic force responsible for the viral growth in value of products, services and even entire organizations. Network effect facilitate powerful and high margin growth and are conceptualized as key differentiators and drivers of value creation (Hagiu & Alvarez, 2014).

- Business Ecosystems

Townsend (2009) in a study of business systems came to the conclusion that business ecology emphasizes the relationship between business and its environment. In similar light many scholars in the past have stressed that business systems share significant features with biological system (Beer, 1959; Rothschild, 2004; Kilduff & Tsai, 2003; Schwab et al., 2007). Industrial organizations, in one of such studies was accentuated to be synonymous to a biological organism which possesses the capability to respond to their business environments. This conceptual notion from an ecological standpoint does not perceive the economy as a machine, rather, its argument is based on the fact that the market economy should be best viewed and understood as a living evolving ecosystem (Rothschild, 2004). Ecosystems and an emerging concept from the field of the biological sciences, began to be adopted by other academic fields such as those of the social sciences and business in the 1980s and later on became a core concept of business initiative for venture companies and start-ups in particular. Originally coined by Moore J.F (1993), the business ecosystem concept was described as an economic community supported by a foundation of interacting business entities (individuals and organizations) "the organisms of the business world." Economic communities produce commodities and services that are considered of value to the consumers who just like lead producers, competitors, suppliers and other stakeholders are members of the ecosystem. Within such communities, co-evolution of capabilities and roles over time tends to align with the direction set by one or more central firms. While the role of these lead or central firms within the ecosystem may change in time, the overall function of the ecosystem leader is valued by every entity within the ecosystem in light of the notion that it allows for the constant move towards a shared vision of aligning investments as well as the finding of mutually supportive roles. Inspired by Moore, Torres-Bay (2000) in his explanation of the concept of the business ecosystem, highlights the notion that a business ecosystem illustrates a heterogeneous coalition of organizations within varying industry sectors who come together to form a strategic community of shared business interests or values via the use of a network structure formed around a business community leader whose role is to share its design, or impose its commercial technology standard. In Torres-Bays expression of the business ecosystem, the term “coalition” is used to replace Moore’s “community” paradigm. The “coalition” context according to Torres-Bay highlights the partnership phenomenon that dominates relations that exist between all entities that exist with such business communities.

2.3 Conclusion and summary

A common language across most of the literature reviewed within this thesis is that the business model concept allows for organizations to concisely describe their process of appropriating value. The business model highlights how organizations go about the mission of making money by serving its target customers. Firm A may adopt the concept of commercialization of its products by choosing to sell subscriptions to customers while firm B may choose to adopt the initiative of attaining advertising revenues from other firms and firm C might engage in getting revenue via commissions. The revenue logic of firms is thus illustrated within the business model such that stakeholders are clearly able to identify revenue structure as opposed to revenue volumes.

After careful review of existing literature, it is noteworthy to particularly view the business model as a system of inter-related and structured activities that depict how firms idealize their dealings with customers, partners and other business related entities. More precisely, the business model could be conceptualized as a bundle of very specific processes that are undertaken to satisfy the perceived needs of a target market. The business model also highlights the linkages between every process initiated and undertaken to satisfy the perceived desires of customers and the revenue logic behind that said venture. This definition stipulates as well as captures the essence of what is perceived to be at the core of the context and concept of the business model paradigm which are:

- The focus on the how of a business venture as opposed to the where, what and why
- The focus and emphasis on value creation for all participants/entities of the business venture as opposed to exclusive emphasis on value capture
- The holistic viewpoint on how the entire business ventures scheme are conducted as opposed to the focus on any particular business process function (such as marketing, strategy, operations)
- The realization that partners or external business entities significantly aid the focal firm in the effectuating of essential activities within that focal firm’s business model

The business model viewpoint highlighted above is broadly cognizant of the varying manners in which the business model concept has been implemented in business practice. According to recently published report from the Economic Intelligence Unit, an estimated four thousand (4000) senior level managers in a survey showed preference for new business models over new services or products as a source of present and future competitive advantage. The way and manner in which business ventures idealize and conduct their business will often be considered as being more significant than what they do.

The business model when critically analyzed, is not a static universal framework or tool, void of any specifics and is simply not applicable to every firm. Rather, the business model is a dynamic consistently evolving concept that is exclusive to every single firm and fits to the context of their business initiative and ideology. Nonetheless, business models may be classified via their design themes which highlights the common attributes between organizations. The design themes expressed above may be identified via the creation of a model, classification of the elements within the model and then establishing the connections that hold these elements together. It is from these models that organizations or scholars may identify the similarities and consequently, the differences that exists between the models, thus allowing for the measurement and analysis of extant parameters in a bid to finding resultant principles of each business model type. The ability to clearly classify business models facilitates both comparison and analysis.

The overall objective of the business model of a focal firm is to justify as well as satisfy a perceived need in order to create value for the focal firm and its partners. This illustrated overall objective of the focal firm's business model could also be conceptualized as the value creating insight which is illustrated in the target market value proposition. The business model concept stems from rich and robust conceptual roots. Academics have in many ways conceptualized and perceived the business model from a variety of theoretical angles and this has been highlighted in the literature review part of this thesis.

Platforms, a new type of business model is inspiring disruptions within the global market sectors. The platform concept has significantly altered the manner via which businesses operate, how consumers perceive value and how transactions are conducted. The history of platforms cannot be actually ascertained however the use of the term in relation to models of business, digital marketplaces and ecosystems can be traced to just a few years back. The platform term may be distinguished as well as understood in a variety of ways. Rapid evolution in technological advancements, increased dynamism in the complexity of firm operations and the volatility of today's marketplace have to a high degree increased the popularity of the platform phenomenon.

After an analysis of the available literature on the platform concept, I would consider digital platforms as marketplaces where transactions between two or more user groups take place. While this definition or notion of the platform concept may be perceived as being oversimplified, it does highlight the two or multisided nature of the platform as an executed digital marketplace that thus drives the ecosystems phenomena. Within the context of this simplified definition, the platform concept is established as a paradigm that enables external producers and consumers, the affordability of creating value via interactions between one another. As such, a platform sets an open infrastructure and participative environment for interactions between platform owners/sponsors, consumers and mutually independent business communities that aim to be engaged in symbiotic and complimentary relationships with/within the platform. Platforms encompass a component paradigm or may be considered as a subsystem of an evolving technological system. Platforms are centered on a set of perceived stable components that drive evolution and variety in a system via the constraining of the linkages that exist among components. Platforms, when fundamentally viewed from their architectural perspective are practically quite similar: the system adopts a framework where it is partitioned in a set of core competencies that allow for minimal variety and a set of complementary peripheral components that drive high variety.

Platforms provide infrastructure and establish rules for marketplaces that bring together multiple stakeholders. The stakeholders within a platform hold the potential to fill four significant roles: producers, consumers, providers and consumers. It is critical to note that no one stakeholder's role is static, roles are consistently evolving and shifting. Such is the dynamism of the platform concept and the understanding of the relationships internal and external to the platform ecosystem is central to both platform concept and strategy. The notion of platform business highlights the bringing together of a variety of business stakeholders to be engaged in high value exchanges. Within platform businesses, the core assets are interactions and information, both of which are also the central source of the competitive advantage of the platform and the value it creates.

3 Business model change

Change, transformation or innovation, regardless of which of these stated terms a firm chooses to adopt, will consistently remain a part of that firm's proven strategy partly responsible for some degree of its success (Kuratko et al, 2011). Transformation, or from the viewpoint of this thesis "change" within firms has been in recent times a core topic of discussion amongst practitioners and academics. Until a decade and a half ago, innovation which was and still remains synonymous to change within firms was mainly directed at new products or new services. Improved products, extensions of product lines or the complete overhaul of existing products to make way for new and improved ones was perceived as the prevalent business strategy for firms to innovate and increase their levels of competitiveness. This was the manner via which such firms created additional value with respect to their target customers (Osterwalder & Pigneur, 2010). In more recent times however, novel developments in technology, global openness, access to significant volume of information and more rapid development of economies has put firms in such dire stance that product or services improvements, extensions or transformations are no longer feasible strategies for staying competitive within market environments. Competition within such market environments have become fiercer, thus leading firms to seek news ways to not only stay competitive but also establish innovative means of delivering value to customers. One of such new concepts for the achievement of the above-mentioned goals is business model change or transformation (ibid, 2010). This ideology has become a leading topic within research, not only in the innovative management and information systems discipline but in all major business focused disciplines and amongst practitioners.

In this section of the literature review, we delve into an understanding of business model change. We define business model change, and analyze the dynamics of business model change based on existing literature. We further look at the challenges associated with the implementation of business model change and what existing studies propose to be suitable methods of addressing such challenges.

3.1 Defining business model change

De Reuver et al in a 2007 study stressed the notion that business models are not static, as such it is imperative that they be revised over time to fit the changing business environments, regulations and current technologies. Comes & Berniker (2008) emphasize that product and process innovation are significantly understood by firms and managers, however the business model transformation concept remains an area that has not been delved into with great extent. In light of recent rapid technological development, activities that concern innovation can no longer simply revolve around traditional technology implementation, and research & development, but must now include business model transformations (Chesbrough, 2007). Change or transformation from a business model perspective remains one of the most ideal ways via which firms may achieve sustainable competitive advantage according to Zott & Amit (2010).

Business model transformation/change is not necessarily a new phenomenon. Rather, it is a concept that is gradually finding its way into the sphere of academia (Santos et al, 2009). Business model transformation/change holds the potential to establish new markets as well as disrupt existing ones (Comes &Berniker, 2008). In a 2005 survey conducted by the American Management Association, it was concluded that 54 percent of executives agreed that business model transformation would become more significant to firms than product or service innovation. In another 2006 study conducted by IBM, 30 percent of the respondents stressed the notion that business model change was a key focus area for the continued development and growth of firms. While it is evident that the business model change concept is an important business area, it remains relatively ignored in organizational practices and is assumed to be a significantly complex task for many organizations to undertake (Comes &Berniker, 2008).

Aspara et al (2011) define business model change/transformation as a switch, revision or redesign in the perceived logic in the way and manner via which value is created by firms, when it comes to the value creating linkages within the firm's portfolio of business ventures from one point in time to another. Business models hold the potential to evolve in response to internal influences as well as external factors (Mintzberg, 1978). Internal factors according to Mintzberg may relate to the dynamics between the different dimensions of a business model, managerial decisions and organization knowledge. External factors refer to volatility of the market, sometimes caused by environmental changes, new entrants, increasing costs of resources and emergence of substitutes. Other authors such as Hammer and Champy (2009) define business model change as a series of comprehensive processes undertaken by firms in a bid to re-invigorate their business prospects by abandoning previous business models. They stress that business model transformation or re-engineering is the fundamental rethinking and radical redesign of a venture's model of business so as to achieve critical improvements in contemporary measures of firm performance. Davenport (1993) equally points out that business model re-engineering encompasses the envisioning of novel ideologies, actual process design and implementation of change in technological, human and organizational elements of that firm's business model.

Frankenberger et al (2013) asserts that fundamental business model changes is a novel way of creating and capturing value, and may be achieved via transformations in one or more components of the business model. The authors claim that business model changes exceed the scope of simply introducing or extending product or service offerings. Rather, business model change aims to open-up completely new opportunities and how firms engage in economic exchanges. The Frankenberger et al study went on to propose four different stages of business model transformation process: initiation, ideation, integration and implementation. In another similar study undertaken by Cavalcante et al (2011), the authors hold that the business model functions as a systematic analytical tool and thus proposed a typology of business model change that begins from business model creation, extension, revision and ends at the termination stage.

Zott & Amit (2010), who proposed the activity system view of the business model concept stress that business model transformation may be actualized with any one of the following:

- The addition of novel activities, referring to new activity system content
- The linking of activities in a newly defined manner or structure, referring to activity system structure
- Changing one or more of the entities that perform any of the business venture activities, referring to new activity system governance.

A large part of traditional views on business planning and change processes are considered challenging in light of the fact that the discrepancies that exist between existing firm knowledge and the knowledge assumed to be possessed by the planning system are quite enormous (McGrath, 2010). As firms initiate the adoption of new business models, the knowledge related assumptions of the former model will significantly differ from the to-be proposed business model.

A change framework postulated by Linder & Cantrell (2000) highlights the ever-dynamic nature of business models and thus describes business models of organizations as merely an illustration of that business model at a specific point in time. A majority of firms' business models largely are under constant pressure to undergo innovation, change or evolve as a result of the dynamic characteristics of their complex business environments, fierce competition, technological advancements and more knowledgeable consumers. Linder and Cantrell's change model (Figure 1) highlights the development of the change model over time.

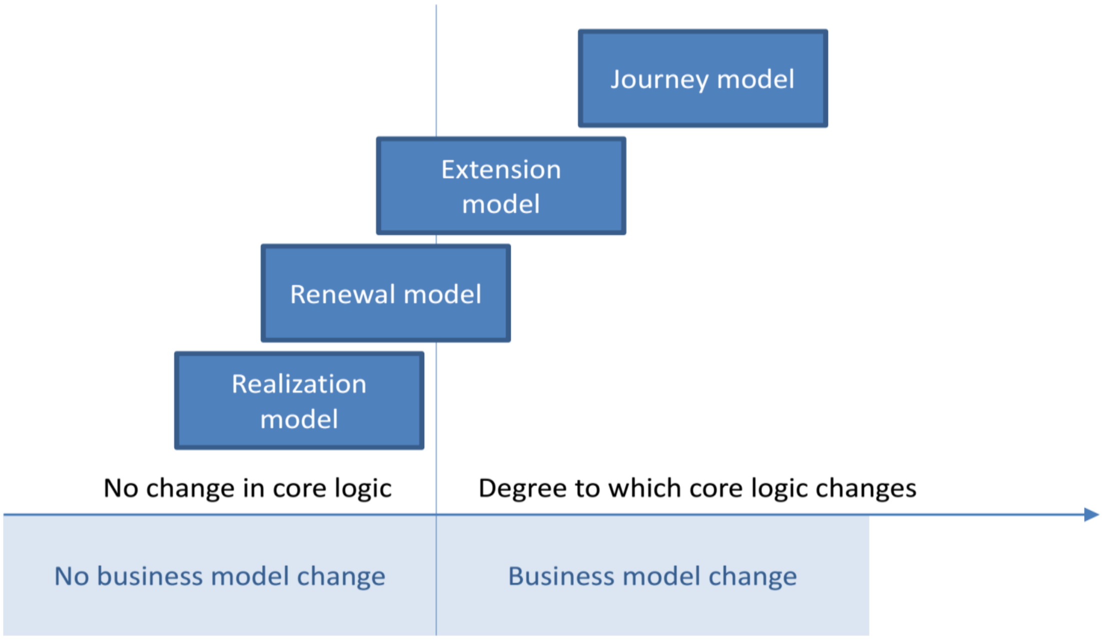

Figure 1: Change Model of Firms Business Model (Linder & Cantrell, 2000).

In the above illustration, the realization model consolidates the least level of change. Here, the firm as a matter of fact merely maximizes its returns from its existing operating logic. In a situation where the firm is expectant of some geographical expansion and growth in customer base, but such a firm does not foresee huge transformations to the business model, then the firm is said to be active within the realization model. The renewal model on the other hand can resonates among those firms trying to position themselves at the top of the price-value curve, and for those firms who seek to consistently adopt new ways of renewing service platforms, pricing, branding, product lines and competitive strategies. The extension model highlights organizations who aim at consistently innovating venture processes in a bid to stretch current core competencies, products/services, and value chain function to leverage on new markets.

3.2 Relevance of business model change

Studies undertaken on the topic of business models continue to converge on the ideology that organizations must recognize the importance of adopting innovative business models if they are to remain competitive in today's dynamic business markets (Bouchikhi and Kimberly, 2003; Amit and Zott, 2010; Chesbrough and Rosenbloom, 2002; Chesbrough, 2007; Comes and Berniker, 2008; Hamel, 2000; McGrath, 2010; Mitchell and Coles, 2003; Venkatraman and Henderson, 2008; Teece, 2010). A majority of managers according to a global survey favored the concept of a new business model over new products and services as a means of competitive advantage going into the future (Amit & Zott, 2010). New business models hold the potential to either create new markets or allow for firms to establish and exploit new opportunities within existing markets. Johnson, Christensen & Kagermann (2008) assert that business model change or innovation functions as a facilitator for corporate transformation and renewal. Chesbrough (2010) highlights that advancements in technology on its own would have minimal commercial value to business ventures until firms adopt and implement innovative business models. Sako (2012) further argues that even with the lack or inadequacy of novel technology, business models can be central to achieving increased business performance and overall venture success.

Johnson et al (2008) however take another view point on the business model debate and argue that established organizations undertake the process of business model transformation rather lightly, in light of the notion that they possess the capacity to often create new products or services that may disrupt competitors or market norms without such organizations necessarily changing or transforming their business models. Within the Johnson et al study, it is proposed that the need for business model change should only be undertaken in situations when there is need to adjust all elements of the current business model. The study further emphasizes that business model change may not be necessary for business ventures unless the change guarantees imminent benefits. Nonetheless, a significant number of studies on the business model change concept agree that business model transformation can drive sustainable competitive advantage. No business model lasts forever, and regardless of how successful a firm's initial business model may be perceived, business environments constantly change, hence it is deemed a necessity that firms transform their business model to fit current trends. Santos et al (2009) highlight several implications of business model change. From their viewpoint, they agree that business model transformation offers an opportunity for lean value creation because the necessity of investing heavily on product or service enhancements or waiting to create breakthrough technology would no longer be required. According to Santos et al, the above argument holds true because in their opinion, the cost of business model change/transformation equates to the cost of organizational change. Organizational change, whether viewed as expensive or cheap is debatable, as several studies describe the business model as a systematic framework that would require extensive restructuring and reorganization of firm processes and sometimes even the entire organization ((Nenonen & Storbacka, 2010; Santos et al.,2009; Teece, 2009, Tikkanen et al., 2005). Ideally successful business model transformations, according to a cross section of literature reviewed have been born out of severe financial distress. One of such cases reviewed is that of IBM, who altered an almost seemingly hopeless business crisis and turned it into a success story by embracing a new, service-based business model in the early 90s (Santos et al, 2009). While the reviewed literature does not categorically state that business model change is always the result of severe financial challenge on the path of firms, they do however converge on the notion that business model change allows firms to identify their burning platforms and thus proactively engage in current business model appraisal and then subsequent transformation (Venkatraman & Henderson, 2008; Chesbrough, 2007).

The process of business model change can, to a high degree drive firms to identify or recognize valuable opportunities and thus initiate capitalization on these prospects at a much faster pace than market competitors. Comes & Berniker (2008) highlight the significance of business model change when they argue that for firms faced with stalling growth and dwindling performance within rapidly evolving business environments, business model change then becomes a matter of life and death for such an organization.

3.3 Dynamics of business model change

In a study undertaken by Cooper (1996), it was discovered that the strongest common denominator in any successful change or transformation was a ¨high quality¨ change process. The mere fact that a process is initiated is not enough, rather Cooper emphasized that it was the quality and nature of the process that yielded superior benefits. A similar notion may be attributed to the business model change process. In other similar studies, researchers advocate the significance of extensive exploration in business model design and business model transformation. Chesbrough (2010) reveals that the same rules of experimentation that are true for general change processes are also useful for experimentation with business models. McGrath (2010) stresses that business model experimentation takes place across and within organizations, and it is practically not ascertainable in advance which business model change processes would be most ideal. In fact, business models must usually be studied over a specific time frame, which justifies the need for experimentation, because business models, just like strategy are subject to evolvability with time, Teece (2010) and McGrath (2010) suggest that a discovery driven approach should be implemented in the change process. As with every entity within business environments, change is deemed unavoidable, hence it is nearly impossible to discover what assumptions and constraints will shape the business environments of the future.

To delve further into the dynamics of business model change, Hedman & Kalling (2003) highlight that due to the non-static characteristics of business models, a process perspective be included in the change model. Ahokangas & Myllykoski (2013) assert that when business models are deeply embedded within organizations, changing them will obviously be quite challenging. Fundamental transformations in any business model will require significant commitment and support from top management of firms proposing such changes (Chesbrough, 2007). Process theories comprise notions that aim to elaborate on the how and why a process unfolds over time (Van de Ven & Sun, 2011). In a 1995 study by Van de Ven & Poole, four alternative process theories are established to explain development and change as they occur within organizations. These alternative process theories according to the authors include the following; 1) Evolution, 2) Dialectic, 3) Life cycle, and 4) teleology. The evolution and dialectic theories focus on notion that the unit of change revolves around multiple entities, while the other two theories (life cycle and teleology) express that the unit of change is a single entity (Van de Ven & Poole, 1995). Looking into the view point of change stemming from multiple entities, a study pushed forward by Demil & Lecocq (2010) analyzed business model transformation via the focus on interactions between the key elements of the business model. Demil & Lecocq discovered three core processes through which business model transformation must undertake. They list them as follows; 1) Monitor and analyze both environmental and firm risks as well as impending uncertainties that may impact the organization's current business model, 2) anticipate the potential outcomes and consequences of the business environment and changes internal to the firm, 3) active participation of key stakeholders in these sequences, implementation of deliberate actions to propagate uniformity between business model components so as to drive or preserve firm performance. From the perspective of this paper, the Evolution and dialectic theories focus on changes to elements (multiple entities) of the business model. The life cycle and teleology theories would seem more appropriate in the instance of this paper as we aim to view the business model as a single entity. The justification for this lies in the fact that firstly, the life cycle change model as postulated by Van de Ven & Poole (1995) depicts a process of change within an entity as progressing through key sequences of phases; start, develop, harvest, terminate. Equally, the teleology change model encapsulates a cycle of goal formation, implementation, evaluation and modification based on acquired knowledge during all undertaken processes.

The effectiveness and sustainability of any firm's model of business is often considered uncertain because market changes hold the potential to rapidly make business models less effective or even obsolete (Sosna et al, 2010). Current business markets are fast paced and volatile thus requiring a dynamic course correction to establish new business models into such markets (Giesen et al, 2010). Wirtz (2011) asserts that the business model of every firm is subject to a life cycle, meaning all business models go through established successive stages with time. The process of proposed change within both the life cycle and teleology models assume that individuals establish or initiate efforts to change in situations where their action thresholds are triggered by significant challenges, opportunities or threats (Van de Vens & Sun, 2011). Within certain field of study, the business model is conceived as a mechanism that facilitates the connection between a firm's technology and its customers' needs (Zott et al, 2011). As such, any impending transformations or changes in market may diminish the potency of existing business models thereby requiring that such business model be reassessed again and again (Shafer et al, 2005; Baden-Fuller & Morgan, 2010). Furthermore, both change models imply standards via which change may be appraised (Van de Ven, 1997). Business models change directly involves both internal and external elements that may be used to appraise the design of the business model (Giesen et al. 2010; Al-Debei & Avison 2010; Teece 2007, 2010). The life cycle and teleology models of change focus on the pre-requisites needed to attain an end state or a proposed goal (Van de Ven & Poole, 1995) Demil & Lecocq (2010) similarly suggest that the business model concept highlights a framework for transformation approach, where the business model is perceived as a tool that aids to address change and focus on innovation within the firm. Osterwalder et al (2005) equally points out that in a situation where a firm decides to change an existing business model or adopt a new one, the visualization and capture of the new business model can improve planning, transformation processes and implementation phases of the firm. Osterwalder et al assert that it is much simpler to transition from one point to the next when all key stakeholders understand, communicate and can identify which elements of the business model need to be changed. Finally, the change models discussed above hold the assumption that every developing entity is purposeful and adaptive, by itself or in unison or interaction with another (Van de Ven, 1997). Such an entity socially constructs a pre-proposed or envisioned end state and thus chooses an applicable course of action to reach that end state from available alternatives.

Sosna et al (2010) highlights the explore-exploit stages extant in the process of business model transformation. Their study’s model elaborates on the notion of exploration and exploitation of business opportunities with the model comprising of four key phases 1) Exploration the initial business model design and testing, 2) exploration of all paradigms of business model development, 3) refined business model scaling, and 4) exploitation and additional exploration. As is highlighted, the first two phases are termed exploration stages and the latter two considered as exploitation phases. Osterwalder et al (2005) outline the phases of business model change in four steps; planning, implementation and capturing, visualizing and eventually change. The Osterwalder et al process of business model change assumes that the third stage ¨visualization¨ aims to improve the business plan and its implementation. The process of business model change according to Wirtz (2011) consist of the stages of initiation, concept, implementation and evaluation. In the initiation stage encompasses an analysis of the strengths and weaknesses of the existing business model, in addition to the gathering of ideas, an analysis of inventions aimed at innovation aptitude, and the establishing of change via internal and external factors. The concept phase is said to be focused on the development of rough and detailed concepts, detailed illustrations and determinations of the interactions of the components of the business model. Project schedules, comparisons of recourses and competencies from a target-performance view point, change process initiation and risk management are all elements of the implementation stage while the evaluation stage resonates around the control of corporate success data, consistency of correction of implemented components and structure, continued examination of unforeseen/unwanted changes in a bid to securing sustainability of the to be business model. Quite similar to the above-mentioned studies, Gassmann et al (2014) recommends that the dynamics of business model change entails processes such as initiation: which involves an analysis of an ecosystem, ideation: which is about the selection of ideas and is an iterative process between initiation and the integration phase, integration: implies the detailing of the business model and implementation: the final step of the process in the realization of the business model change plan. This phase consists of sub-steps that may include testing, adaptation and eventually, the use of the business model in market environments.

3.4 Challenges of business model change

Two critical things become evident when analyzing business model change: they are a necessity and significantly needed, but apparently quite complex to achieve. Studies have revealed that experimenting with the concept of new business models pays off in both the short and long run. However, an emanating question that resonates around the business sphere is why aren't more firms engaging and experimenting with business model change (Chesbrough, 2010)? The business model change phenomena within organizations seems to be an interesting yet threatening and intimidating subject matter because of the challenges imminent in moving from one business model to another (McGrath, 2010). In this section of the paper, the challenges of business model change are outlined.

Businesses encounter significant challenges/barriers when they undertake business model transformation. This is evident in some major studies (Chesbrough, 2010; Amit & Zott, 2001). The configurations and process of transitioning to a new business model often conflict with the dynamics of the current business. There is usually the increased tendency to resist any form of business model transition or experimentation by managers and executives as a result of conflicting interests. The new products or services associated to the new business model may serve non-core customers at price points that the organization's current customers may be unwilling to pay, an outcome that will be unacceptable by managers who are used to being appraised on the basis of the success of the current business model (McGrath, 2010). Stakeholders may also show concern that the new business model may not deliver as much value to the firm in its infancy, and in certain situations, the degree of growth margins may be lower at the initialization of the new business model than would normally have been envisaged by the firm. However, Chesbrough (2010) highlights that challenges already exist form barriers before even the recognition of the need for business model change.

According to Chesbrough (2010), cognitive barriers that hinder new business model adoption from reaching the unbiased attention of firm executives are key challenges to business model change. Such cognitive biases as established by Chesbrough arise from the already perceived success of the current business model which influences significantly the direction of business decisions of the future. Only the business issues synonymous with the current business model are deemed relevant while those perceived as outside the confines of the current business model are generally filtered out of any decision-making process. Given the very large volume of available information and the ever-complex business environment, the creation of these cognitive channels are perceived as facilitators that aid managers to focus on what is deemed to be relevant. While one might argue that cognitive bias drives the organization to arrive at decisions much faster, it does hinder the leveraging on potentially new opportunities and new directions and might compel senior management to only see what is directly ahead of them. If no obstacles are immediately and clearly visible or considered significantly threatening in the current business, then the need for change is deemed unimportant.

The business model transformation leadership gap, another key challenge to the undertaking of business model transformation is described by Chesbrough (2007) as a situation whereby the structure of an organization are such that no individual is available to take on leadership role of the business model transformation process as managers are circulated within the organization within short time intervals (usually 2 to 3-year periods). Chesbrough stresses that this time is rather inadequate to create new business models thus compelling the managers to put all their focus on the growth and sustenance of the current business model.

A considerable number of issues associated to business model change have been perceived to be linked to the structure of the specific organization. In the event of the introduction of a new business model, such a model will usually reside within a separate unit of some sort. In practice, such new business unit is usually kept separate which results in certain challenges as the business model cannot be detached from other organizational processes. For instance, the budgeting and financial units of the parent organization will possess some level of influence on the new unit forcing it to adhere to, and comply with some of the assumptions of the old or current business model (Comes & Berniker, 2008). According to studies on the business model transformation construct, the sales department of any organization is arguably where a sizeable portion of the objection resonate, as the stakeholders involved in the sales channels usually known as the ¨sales force¨, hold the notion that any modifications or overhaul of the revenue logic of the firm is a threat to their perceived success.

Santos et al (2009) discuss barriers of business model change as they concern larger, multi-unit organizations. Their studies emphasize the view-point that while such organizations might favor opportunities associated with business model change, the assumptions that such change might equally constrain the activities of individual units within the organization increases the likelihood of not initiating such change processes. Santos et al (2009) argue that business model change can potentially alter the scope of the organization such that the change does not comply or align with the long-term strategy of that organization. They further argue that business model change within such large organizations may conflict with the strategic operations of several individual units.

Tikkanen et al (2005) accentuate that the major challenge of any sort of change is the changing attitudes of human beings. Mutual perceptions and attitude towards change dwells within the culture of every organization, and can be deeply rooted. Tikkanen et al (2005) state that organizational culture holds the potential to influence immensely, how individuals within the firm are geared towards working in the strategic direction of the firm. Organizational culture artefacts are represented via symbols, beliefs, ideologies, language, myths and rituals (Pettigrew, 1979) as such the role of organizational culture towards business model change initiatives resonate in the manner via which the highlighted artefacts are able to drive or hinder the strive for business model change.

3.5 From pipes to platforms

Digitally-driven businesses exploit the potential of the internet as a complement to their traditional operations (Zott et al, 2011). Firms who adopt internet driven businesses leverage on the potential to achieve increased performance, higher profit margins and attain accelerated growth over a relative short amount of time in comparison to traditional businesses or ventures that run on the pipe business model (Sakellaridis & Stiakakis 2011).

One of the key characteristics of the platform business model or a digitally driven venture is scalability. This core feature of internet-based ventures should be one of the key considerations as regards technical infrastructure of the firm, however, it is equally pertinent that organizations engaged in internet-driven businesses pay attention to the scalability of their business model (Su et al, 2001). Stampfl et al (2013) assert that the scalability factor be considered as being a significant element of business model transformation. The scalability of any existing business model may be expanded via the concentration of value by engaging co-partners and through franchising. It is crucial that organizational stakeholders pay cognizance to the significance of acknowledging and understanding the concept of partners' incentives when about to move from a traditional business model to an internet-based one (Eriksson et al. 2014). The scalability element represents one of the biggest influences and a fundamental factor when transitioning from a pipe to platform business model (Amit & Zott 2001, Rappa 2001, Bouwman & MacInnes 2006). Transitioning to a digitally oriented business model offers organizations the capacity to scale up or down in the event of an economic disruption. Furthermore, such a transition induces increased growth potential which resonates into positive impact on investor interest in the firm (Stampfl et al, 2013).

Besides the scalability factor that is achieved from transitioning to a platform business model, there is also the creation of what is called a digital ecosystem. This is a networked architecture and collaborative environment for business transactions (Chang & West, 2006). The digital ecosystem could further be defined as an open, loosely coupled, domain clustered, self-organizing, and demand driven environment where varying entities (biological, digital and economic) are responsive and proactive as regards their benefits (usually in the form of economic gain) (Chang & West, 2006). Digital ecosystems offer such services as extended web service architecture, self-organizing intelligent agents, ontology-focused knowledge sharing tools and a swarm of intelligent recommendation systems all geared to drive competitive advantage and increase value that is offered to customers.

Zott & Amit (2006) assert the significant function of ecosystems in business model success. Ecosystems of suppliers, competitors, and complementary actors aid in propagating firms' efforts to transform their business models (Björkdahl & Holmén, 2013). The external linkage of partners, customers and suppliers represents a key characteristic of an effective and collaborative business model (Giesen et al. 2010). Relationships within business model change networks are core elements in the development and commercialization of innovations (Timmers, 1998). By shifting to a platform or digitally oriented business model, firms can leverage on the potential of reducing the threat of competition. By developing and transitioning to a business model that aims to benefit all partners, firms make it difficult for newcomers and even existing competition to disrupt any piece of the value chain (Ojala and Tyrväinen, 2011). The pipe to platform shift allows for focus to transition from creating value via internal activities to creating value through external relations. If firms are to enhance communication and value co-creation with customers, then it is imperative that the pipe tom platform shift is adopted. It is also suggested that firms adjust their strategies and operations to some extent while developing their networked business model (Heikkilä, Heikkilä & Tinnilä 2008).

3.6 Conclusion

A common language across most of the literature reviewed within this thesis is that the business model concept allows for organizations to concisely describe their process of appropriating value. The business model highlights how organizations go about the mission of making money by serving its target customers. Firm A may adopt the concept of commercialization of its products by choosing to sell subscriptions to customers while firm B may choose to adopt the initiative of attaining advertising revenues from other firms and firm C might engage in getting revenue via commissions. The revenue logic of firms is thus illustrated within the business model such that stakeholders are clearly able to identify revenue structure as opposed to revenue volumes.

After careful review of existing literature, it is noteworthy to particularly view the business model as a system of inter-related and structured activities that depict how firms idealize their dealings with customers, partners and other business-related entities. More precisely, the business model could be conceptualized as a bundle of very specific processes that are undertaken to satisfy the perceived needs of a target market. The business model also highlights the linkages between every process initiated and undertaken to satisfy the perceived desires of customers and the revenue logic behind that said venture. This definition stipulates as well as captures the essence of what is perceived to be at the core of the context and concept of the business model paradigm which are:

- The focus on the how of a business venture as opposed to the where, what and why
- The focus and emphasis on value creation for all participants/entities of the business venture as opposed to exclusive emphasis on value capture
- The holistic viewpoint on how the entire business ventures scheme are conducted as opposed to the focus on any particular business process function (such as marketing, strategy, operations)
- The realization that partners or external business entities significantly aid the focal firm in the effectuation of essential activities within that focal firm's business model

The business model viewpoint highlighted above is broadly cognizant of the varying manners in which the business model concept has been implemented in business practice. According to a recently published report from the Economic Intelligence Unit, an estimated four thousand (4000) senior level managers in a survey showed preference for new business models over new services or products as a source of present and future competitive advantage. The way and manner in which business ventures idealize and illustrate their business will often be considered as being more significant than what they do.

The business model when critically analyzed, is not a static universal framework or tool, void of any specifics and is simply not applicable to every firm. Rather, the business model is a dynamic consistently evolving concept that is exclusive to every single firm and fits to the context of their business initiative and ideology. Nonetheless, business models may be classified via their design themes which highlights the common attributes between organizations. The design themes expressed above may be identified via the creation of a model, classification of the elements within the model and thus establishes the connections that hold these elements together. It is from these models that organizations or scholars may identify the similarities and consequently, the differences that exists between the models, thus allowing for the measurement and analysis of extant parameters in a bid to finding resultant principles of each business model type. The ability to clearly classify business models facilitates both comparison and analysis.

The overall objective of the business model of a focal firm is to justify as well as satisfy a perceived need in order to create value for customers, the focal firm and its partners. This illustrated overall objective of the focal firm's business model could also be conceptualized as the value creating insight which is illustrated in the target market's value proposition. The business model concept stems from rich and robust conceptual roots. Academics have in many ways conceptualized and perceived the business model from a variety of theoretical angles and this has been highlighted in the literature review part of this thesis.

Platforms, a new type of business model is inspiring disruptions within the global market sectors. The platform concept has significantly altered the manner via which businesses operate, how consumers perceive value and how transactions are conducted. The history of platforms cannot be actually ascertained however the use of the term in relation to models of business, digital marketplaces and ecosystems can be traced to just a few years back. The platform term may be distinguished as well as understood in a variety of ways. Rapid evolution in technological advancements, increased dynamism in the complexity of firm operations and the volatility of today's marketplace have to a high degree increased the popularity of the platform phenomenon.

After an analysis of the available literature on the platform concept, I would consider digital platforms as marketplaces where transactions between two or more user groups take place. While this definition or notion of the platform concept may be perceived as being oversimplified, it does highlight the two or multisided nature of the platform as an executed digital marketplace that thus drives the ecosystems phenomena. Within the context of this simplified definition, the platform concept is established as a paradigm that enables external producers and consumers, the affordability of creating value via interactions between one another. As such, a platform sets an open infrastructure and participative environment for interactions between platform owners/sponsors, consumers and mutually independent business communities that aim to be engaged in symbiotic and complimentary relationships with/within the platform. Platforms encompass a component paradigm or may be considered as a subsystem of an evolving technological system. Platforms are centered on a set of perceived stable components that drive evolution and variety in a system via the constraining of the linkages that exist among components. Platforms, when fundamentally viewed from their architectural perspective are practically quite similar: the system adopts a framework where it is partitioned in a set of core competencies that allow for minimal variety and a set of complementary peripheral components that drive high variety.

Platforms provide infrastructure and establish rules for marketplaces that bring together multiple stakeholders. The stakeholders within a platform hold the potential to fill four significant roles: producers, consumers, providers and consumers. It is critical to note that no one stakeholder's role is static, roles are consistently evolving and shifting. Such is the dynamism of the platform concept and the understanding of the relationships internal and external to the platform ecosystem is central to both platform concept and strategy. The notion of platform business highlights the bringing together of a variety of business stakeholders to be engaged in high value exchanges. Within platform businesses, the core assets are interactions and information, both of which are also the central source of the competitive advantage of the platform and the value it creates.

Business models, whether pipe or platform driven, are subject to consistent review to ensure that they fit or align with the complex, rapidly dynamic and uncertain business markets. Such dynamism, market volatility, complexity and uncertainty are usually consequences of customer-size base and nature, market regulations and policies, market opportunities, levels of competition, and technological advances (Al-Debei &Avison, 2010). It is paramount that organizations be able to accurately perceive ongoing transformations/changes within their business environment.

Based on available literature on the challenges of business model transition or transformation, it is easy to conclude that barriers to business model change are perceived to be rooted in the attitude of the individuals who are part of the organization where such change is proposed. Thus, the question: is business model change to any degree different from any other organizational change? According to the literature reviewed during the course of this thesis, three differentiating views may be established:

Firstly, a core element of the business model construct as highlighted by Teece (2009), Tikkanen et al. (2005) and Nenonen & Storbacka (2010) is the systematic nature of the business model. This systematic nature of the business model construct implies that in order to change one part of the business model, it is imperative that the configuration or fit of the altered part is still able to fit with the overall model. What this explicitly means is that to alter a single part of any business model, one must alter the entire business model. To give an example, if the sales channel of a business venture is altered but the inventory channel does not support this transformation, the resulting business model will be dissatisfactory.

Secondly, As Teece (2010) argues that while the superficial attributes or general theme of any business model may be easily comprehensible, it still remains quite challenging to replicate a business model. The reason for this lies in the fact that implementing a new business model requires systems and processes that may be significantly difficult to articulate and develop. There might also be some degree of opacity that might exist within any successful business model. Furthermore, the reluctance to alter a ventures business model among incumbents may make it quite challenging to change or transform in an instance. Teece’s (2010) argument that business models are hard to imitate thus propagates the conclusion that in order to maximize benefits and sustainable competitive advantage from business model transformation, the change must be considered within the context of the focal firm. Other organizational changes might in most cases be significantly different from business model change and this is one of the particular challenges surrounding the business model change process.

Thirdly, one of the key variations in the adoption of business model change in contrast to other forms of organizational change is that the outcomes of the business model change process holds a relatively high degree of uncertainty. As firms initiate the transformations of their business models, there is absolutely no pre-envisaged notion of which business model design will eventually be deemed as being successful (McGrath, 2010). This uncertainty attribute of the outcome of business model change, again differentiates business model transformation from other organizational change processes that have a clearly defined and articulated end result.

The concept of transitioning from a pipe to a platform is on a high degree easily comprehensible: business related entities that were once solely physically oriented are nowadays being switched to digital. However, after critical analysis of available literature, it is rather surprising that there is only very little academic research on the concept of pipe (traditional business model) to platform transition itself. Only about 11 qualified academic papers were found on the topic. This is despite the fact that this phenomenon has being making significant rounds within the business world. Nine (9) of the most thorough studies on the topic of the eleven stated above were conducted from a high-level point of view of organizations or larger phenomenon and not form the perspective of individual organizations. In light of this, best practices regarding such transition have not been critically studied, neither have studies on the drivers and barriers of the pipe to platform switch been thoroughly delved into. In the context of the literature reviewed within the course of this thesis, a significant portion of the answers used in addressing the research questions have come largely from the context of business model change and not specifically pipe to platform transition or change.

3.7 Framework for identifying the challenges of business model change

Based on the literary findings within this chapter, a model has been developed. The developed framework aims to link the most significant elements of the literature review and thus consequently provide an illustration of how pipes transition into platform business model but more importantly it aids highlight the inherent challenges that are extant during the process of this transition. In other words, the framework forms an indication of the various perspectives, notions and interrelations within the specific context of business model transformation or change. Therewith, existing gaps in business model change literature will hopefully be narrowed.

Another key goal of the framework is that it will be used as a valid indication and response with regards the research questions presented in the introductory chapter of this thesis. Empirical data collected and correlated will thereafter be utilized in a bid to create and establish assumptions regarding the generic validity, relevance and transferability, while allowing ample room for the identification of research limitations and consequently suggestions for future research.

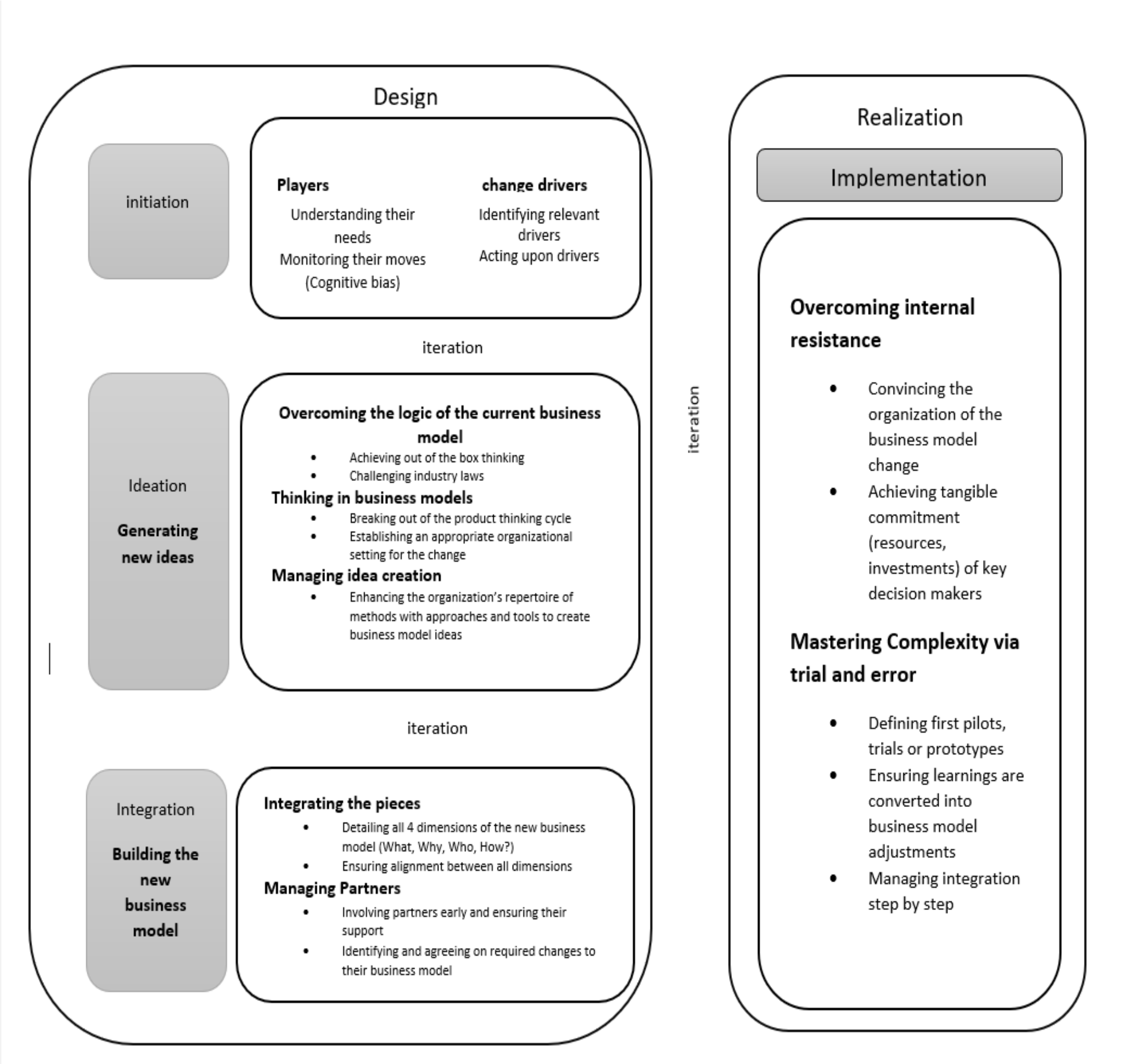

Figure 3. Framework for Phases of business model change process and their key challenges

In the framework above, four stages of the business model transformation process are illustrated. Also depicted within the framework are accompanying challenges within each of the stages. The framework is drawn from data gathered from existing literature.

The first stage, the initiation stage is characterized by impediments such as the need to discover and react to the triggers from both change drivers and players within the ecosystem. This challenge identifies with the challenge of the general complexity of business model transformation. This impediment is in line with existing literature such as that of Zott & Amit (2009) who highlight that the understanding of customer needs is a complex undertaking. The need to identify and comprehend the innate needs of target customer needs as the starting point for the design and development of new business models is equally identified in the studies of Kim & Mauborgne (2004); Girotra & Netessine (2011).

The second stage, the ideation stage is characterized by three key challenges: The challenge of overcoming the current of dominant business logic, the challenge of focusing on business model thinking and the challenge of organizational capacity and development of tools aimed at the creation of business model initiatives. With respect to the barrier of overcoming the dominant business logic, few literatures have highlighted the impediments that barricade the journey towards overcoming the influence of the dominant business logic of the organization (Chesborough, 2010; Bouchikhi & Kimberely, 2003). The other two challenges identified in this stage, the barrier of focusing on business model thinking as opposed to product innovation and the lack of organizational capacity and tools to drive business model idea creation has been identified in the study of Chesborough (2010).

There has been more literature regarding the third stage identified in the framework. The integration stage comprises of two key impediments. Integrating and aligning all dimensions of a new business model in a bid to develop a successful model and the challenge of managing stakeholders. Previous studies have emphasized the significance of aligning components of business models and the associated challenges of establishing seamless integration of these components (Casadesus-Masanell & Ricart, 2011; Morris, Schindehutte, & Allen, 2005). Other studies emphasize the notion that a key challenge in the process of designing new and innovative business models is that individual components of the business model must be designed with reference to each other (Teece, 2010; Zott & Amit, 2008, 2009). The second challenge in this stage: the challenge of managing stakeholders/partners is in line with the contributions of extant literature in the field. Researchers argue that partners management and integration is a significant challenge in the design and commercialization of new business model (Shafer, Smith, & Linder, 2005; Teece, 2010; Zott & Amit, 2008). In light of the fact that business model is perceived as a boundary spanning concept, a key goal of the new business model is to both create and capture value for itself and for target stakeholders. However due to the uncertainties of outcomes and the intensive resource requirement of undertaking business model transformation, stakeholders need to be managed effectively so as to get them on board (Magretta, 2002; Shafer et al., 2005; Teece, 2010).

The last stage of the business model transformation process as identified in the framework “the implementation stage” is characterized internal resistance. Studies have outlined this particular impediment as they stress that implementation of a new business model is fraught with conflicts either with the existing business model or the existing culture and underlying structure of the organization (Amit and Zott, 2001; Christensen, 1997, 2003). Another key challenge identified in this stage based on the framework is the challenge of mastering complexities via trial or error. In light of the uncertainties and generic complexity of the business model change, it might be difficult to implement the new business model in one single implementation phase. Chesborogh (2010) argues that business model change is best achieved via a process of successive iterations, experimentations and learning. This might be challenging to certain organizations as such an approach requires strong leadership, frameworks for knowledge transfer and financial resources (McGrath, 2010; Morris, Schindehutte, and Allen, 2005; Sosna, Trevinyo-Rodríguez, and Velamuri, 2010; Teece, 2010).

4 RESEARCH METHOD

This chapter highlights and details the research methodology adopted by the thesis' author in the gathering and analysis of data which sought to answer the following research questions:

> RQ1: ***"How is the business model construct understood by executives?"***
> RQ2. "***What challenges do firms encounter when transitioning or adopting the platform business model?"***
>
> RQ2**.** "***How can the challenges identified in the above research question be mitigated?"***

This chapter equally addresses the rationale for the adopted research method and further provides an outline of the research approach used.

4.1 Research Approach

A qualitative research methodology was used within this study. The reason for the adoption of the stated methodology was considered in an effort to develop a deeper understanding of the challenges that are extant in business model transformation/change processes. The core goal herewith is that this research would contribute to the developing theory around the business model change phenomenon.

The qualitative research method was adopted within this study, because it allowed for the propagation of the analysis of all research questions in depth and in detail (Patton, 2002). The writer sought to gather insights on what elements constituted barriers to successful transition from a traditional (pipe) business model to one that is platform driven. Given that an understanding of such a phenomenon cannot be predetermined, the goal of the adopted research method is aimed at uncovering thoughts, providing ideas to develop theory, and encouraging further research (Turner, 2010).

Qualitative research is defined as an incisive process of understanding that is focused on methodological and distinct traditions of inquiry aimed at the exploration of social, human or organizational oriented challenges. During the process of such research methodology, data is collected by the researcher and analyzed via the use of the many data analysis techniques (Srivastava & Tomson, 2009). Qualitative research adopts an inductive approach to gaining insights about certain phenomenon, thus allowing studies to uncover ideologies and useful information that could be used in the construction of enlightening patterns. The validity concept within the qualitative research method has in recent times undergone relevant changes to strengthen the distinct contributions that scientific traditions aims to offer the development of knowledge (Whittemore, Chase & Mandle 2001). One of the key advantages of adopting the qualitative research methodology is that it allows for critical, in-depth study of a particular subject; hence it is best suited in exploratory research where the phenomenon of study is relatively new or there is minimal previously published research on that topic (Myers, 2009). Qualitative research used in this thesis holds the potential of providing deeper understanding of phenomena than would have otherwise been obtained from purely quantitative data in light of the fact qualitative research methods are developed and designed to support researchers in their bid or effort to comprehend the social and cultural context of entities. Qualitative research aims to study real situations as opposed to artificial ones and as such, a researcher who chooses to adopt this research methodology is expected to actively immersed in the environment of the phenomenon under study (Myers, 2009).

A primary emphasis of qualitative data is that it focuses on naturally occurring, ordinary phenomenon that exist in natural settings, as such it highlights and describes not just theoretical possibilities but real-life events (Miles & Huberman, 1994). In accordance with this, it is required that qualitative data be locally grounded. In other words, to enforce the strength of qualitative data, data needs to be collected at close proximity with the occurring phenomena. Miles & Huberman (1994) stress that the entity under study is perceived as a specific case which should be embedded in its own exclusive context. An understanding of this context follows the research process and holds the potential of providing rich insights for an occurring phenomenon.

Qualitative research methods allow for causalities to be assessed and is relatively flexible allowing for research process to be altered at any point in time to fit research context. Qualitative data is rich and holistic but may be equally considered as complex, thus making data gathered relatively complex to analyze.

Case studies, the research approach used in this thesis is described by Yin (1994) as ideal in research situations where the number of variables of research interest surpasses the number of data points. In a subsequent study also undertaken by Yin (2004), case studies are defined as empirical enquiries that aim to look into or critically investigate contemporary phenomena in their natural environment. Within case studies, phenomenon is investigated in-depth within their real-life context, particularly in events where the boundaries that exist between phenomena and context are not clearly defined or evident. Data within the case study method may be collected via the use of a variety of techniques. Yin (2009) asserts that such techniques may include surveys, interviews, archived records, field observation, secondary data etc. One of the reasons why the case study method has been chosen for this particular study is that in spite of the many contradictory beliefs of case study critics, data collected need not contain lengthy narratives, rather findings can be reported in a brief concise manner. Furthermore, literature on case studies suggest that it should be used when answering research questions that border on the how or why of phenomena. Yin (2009) equally suggests that case studies should be used in situations where the study requires no control over behavioral events and events that focus on contemporary events. This study focuses on investing what individual stakeholders perceive as the challenges or barriers of transitioning from pipes to platforms (business model change). In light of the fact that the business model construct in itself is a dynamic and relatively complex construct, the use of the case study methods provides a methodology that takes this relative complexity and dynamism into account, as the underlying connotations and logic of data gathered from semi structured interviews provide room for broader richer statements from respondents, thus mitigating complexity to a significant degree.

Case studies propagate an ideal platform for the building of theory (Eisenhardt, 1989) or the development of theory (Dubois & Gadde, 2002). Since the phenomenon under study is perceived to be significant to practitioners, the ability to develop and generalize theories with industry focused implications from research findings is a justifiable reason for adopting the case study research method for this thesis.

This thesis' research approach was decided prior to the initialization of the study but has allowed room for alterations should new findings that need further analysis be discovered during the research process. Yin (2009) accentuates that flexibility is a key element of the case study research method. Research design may be considered an anticipated data reduction methodology in light of the relative restrictions they provide to the study (Miles & Huberman, 1994). Within this study, we have opted to adopt a tightly pre-structured research design which Miles & Huberman (1994) assert is ideal for beginning researchers because of the clarity, direction and structure it provides. Furthermore, a tightly pre-structured research design such as the one adopted for this thesis reduces the challenges of diffuseness and overload encountered in research studies.

4.2 Data collection

Two data collection techniques were used in this study. Data collection with any qualitative focused study is both interactive and naturalistic (Saunders & Lewis, 2012). In light of this, semi-structured, opened ended interviews was used as the primary data collection method. The secondary data collection technique employed getting relevant data from organizational documents.

4.2.1 Interviews

The first data collection method (interviews) was adopted for this thesis with the understanding that such a data collection approach would prompt or inspire a dynamic and rich discussion flow that would allow room for respondents to clarify statements, increase depth of views as well as opinions and build on provided responses (Bloomberg & Volpe, 2012). The open-ended question approach according to Cresswell (2009) allowed for rich articulation and valuable elicitation of views of respondents without the element of constraint to the answering of specific questions.

Interviews being one of the key de-facto standards of data collection within the case study approach, propagates opportunity for an in-depth exchange between the respondent and researcher (Barbour, 2008). The choice of the semi-structured interview approach was steered by an interview schedule consisting of critical questions that were related to the core themes of the study questions. Furthermore, the semi-structured approach was adopted because it aimed to provide the researcher with ample flexibility to guide discussions towards key issues that are highlighted as central to the study.

Despite the notion that interviews allow for the propagation of the uncovering of insights, it is imperative that it be mentioned that they are without their limitations. The impartiality of the collected data may often be questionable given that the insights gained from collected data are a product or result of a subjective interaction between the respondent and the researcher within a particular context (Bloomberg & Volpe, 2012). Other limitations of the semi-structured approach will be addressed in subsequent sections of this chapter.

A significant number of interviews was prearranged to be conducted with various stakeholders and experts within a cross section of industries but whose organizations had been or were recently undergoing some form of business model transition, especially where such transformation was digitally oriented or driven. The proposed interviews sought to expatiate on the meanings of core themes. The interviews were semi-structured and adhered to thematic questioning on the topic of business models and the challenges/barriers of business model transition or change. Each of the interviews was conducted in person by the researcher. All interviews were recorded on tape.

Recordings of all interviews were individually listened to multiple times. During the process of listening, the crux of the content was transcribed. Due to the inherent risks of loss of richness of information, the content of data gathered from the interviews was not analyzed with any quantitative text parsers or text analysis software. The data gathered from the interviews were used as the research's primary data, however, secondary data such as surveys, industry statistics and organizational documents were used to verify statements of some of the interviewed respondents. Findings from the interview were gathered and organized into a spreadsheet document. Data was then analyzed by finding themes and followed by coding. In situations where often occurring themes were identified, the next process was to begin classifying the connections that existed between these themes and then consequently apply such connections to the framework used as the basis for our study. This aided in the establishment of a theoretical constructs for identifying the barriers to business model change.

Eisenhardt (1989) points out that the creation of constructs should assume the first step of creating hypothesis. Only when a construct has been established can a constant comparison between that construct and data take place. This allows for use of emanating or new evidence to be used to sharpen the construct via an iterative process. The time to end the iteration according to Eisenhardt (1989) is when incremental improvements begin to show minimal distinctions. At this point, trying to seek for more distinctions or points of parity between case proposition and gathered data is no longer optimal.

In our analysis of the data, we considered verification as less important in light of the notion that gathered data was used for directing and redirecting the focus of the research. During the process of conducting the semi-structured interviews, our interview questions were founded upon the results of previous interviews. The reason for this is that it allowed for the enabling of theoretical framework to develop and consistently evolve during the interview process. It also allowed for the attainment of direct feedback on proposed constructs during the interview process.

- **Population**

The population targeted for this study was a complete set of members from which a sample was drawn (Saunders & Lewis, 2012). Via purposeful sampling, a group of C-suite executives and senior business leaders within Finland with business operations spanning across several industry sectors were selected. These set of individuals had also showcased some form of influence in the development of their firm's strategy and business logic.

Furthermore, the population for this study were selected on the basis of their ability to provide relevant as well as insightful perspectives on the impact of transformation on the business model of their individual firms. Certain employees without strategic influence or a position of significance would have been limited in richness of relevant views pertaining the study topic, as such only C-suite and senior managers made the population cut.

Total population size could not be determined conclusively, in light of the range of industry sector, individual firms, and additionally, the varying understanding of what insights could be provided by senior managers who fell within the study's population range. However, given that an analysis of what the study aimed to achieve did not require statistical significance, the non-determination of conclusive population size did not pose any major constraint to the reliability and quality of this research.

- **Sampling**

The qualitative nature of this thesis in itself, allowed for an information rich sample set aimed at providing deep and purposeful views that would help to better understand the research questions posed within the study. As such the sampling process adopted a non-probability, purposeful sampling strategy (Patton, 2002). The justification for the adoption of such a sampling methodology was that it allowed for the use of strategic judgement in the selection of appropriate sample set that would be of immense value to the study in itself (Saunders & Lewis, 2012). Furthermore, given factors such as geographic location or proximity, time constraints, availability of respondents etc., the use of the random sampling technique would have otherwise not been a best fit for the study.

Purposeful sampling requires access to key informants within the field of the studied phenomenon who may be of aid in identifying information rich cases (Suri, 2011). A seven-step framework for purposeful sampling was adopted within the research process:

Step 1: Deciding on the research problem, *the research scope of this thesis is to identify the challenges/barriers extant in transitioning from a pipe to a platform business model*

Step 2: Determining the type of data required to establish useful insights, *this thesis is relevant to all firms who are envisioning changing their business model or wanting to shift to a platform business model. It is also quite relevant for academics who are interested in the business model transformation research stream.*

Step 3: Defining the qualities to be possessed by informants, *informants or respondents are individuals who are currently involved or have been involved in the process of business model change*

Step 4: Seeking informants based on qualities defined in step 3,

Step 5: Establishing a structure to illustrate the significance of reliability and competency in the assessment of potential informants

Step 6: Utilization of appropriate data gathering techniques

Step 7: In the analysis of gathered data and the interpretation of finding (we take into consideration that purposeful sampling is an inherently biased method).

- **Interview Schedule**

The drafting of an interview schedule was done prior to the commencement of interviews. This provided a semi-structured basis for the interview process. Via the use of mutually agreed plan an interview schedule was developed. The

- **Pilot Interview**

A pilot interview was conducted with one of the professors in my department. This professor besides being conversant with the structuring of research questions had also on multiple occasions been involved in strategy development within some chosen fields targeted by this study. The aim of the pilot interview was to test whether the proposed interview schedule, the questions, used language and terminology were appropriate and fully understood by respondents. The pilot interview was equally used as a means of familiarizing the researcher with the interview process as well as help identify potential pitfalls and errors of the process.

At the conclusion of the pilot interview, alterations that pertained to primarily language complexity were made. This was done as a means of ensuring all respondents fully comprehended and grasped precisely what the research aimed to achieve.

- **Interviews**

Respondents prior to the interview were briefed that the interview session would last approximately 60 minutes. However, actual time taken to complete each interview session was dependent on the respondent's willingness to discuss views and insights. The interview session on average did las between 25 to 50 minutes on average. Respondents were notified to confirm their willingness to participate and on the anonymity of the interviews via emails and/or phone calls

- **Interview Transcription and Coding**

Interview recordings were taken with the permission of the respondents. Interview recordings were then transcribed via the use of a transcription service. Once transcriptions were completed, all content were verified by the researcher. Consequently, necessary amendments were made and documented. Interview sections deemed as inaudible were marked and interpreted by the researcher through several listening sessions and going back to take notes as well as the use of re-collection from the actual interview session.

An iterative process approach that bordered on qualitative methods of research that required analysis before, during and after all processes of the interview (Miles & Huberman, 1994). Such an iterative process approach required that meticulous structuring and organization of the various elements or components of the data gathering and examination stages.

All written notes collected during interview sessions were moved to an electronic format after every individual interview. Besides storing all forms of data within a local storage, data was equally uploaded to a secure server in a bid to protect original data whilst ensuring availability of back-up copies should it be required at any point in time.

Based on the recommendations of Friese (2014) on the issues of data transcription, data gathered from the interviews were transcribed verbatim and all transcripts that had been verified were converted into an rtf file. Such files were then subsequently imported into a qualitative analysis workbench for data management and then the data was coded. The data coding process involved the organization and segmentation of transcribed data into themes that were established from the data. Open coding was adopted. This involved naming and categorizing emerging patterns by strategically analyzing data on a line by line basis. Considering that this approach was time consuming, the process however, proved to be significantly valuable and effective in highlighting patterns and linkages within data. At the end of the coding phase, a taxonomy of emergent themes based on familiar or holistic themes was created.

During the course of the analysis of data, it had to be taken into cognizance that while the dissection of data established a meaningful approach to identifying themes, caution had to be taken in guaranteeing that the linkages or relationships between various parts of the gathered data remained intact (Miles & Huberman, 1994). Data coding required consistent and continuous tidying and refining in a bid to ensure that the themes that emerged which were not initially considered in the theoretical background framework would form part of the findings.

4.2.2 Organizational document

The use of these documents aimed to provide some fundamental data on the phenomenon understudy within the specific case boundary. Background content and document review as a data collection technique was adopted as a secondary means of gathering empirical data because it allowed for unobtrusive approach that possessed a significant potential of portraying a bigger picture of the to be studied phenomenon (Yin, 2009). The justification for adopting this as a secondary means of data collection approach was focused on the objective and neutral way of obtaining key data.

4.3 Data Analysis

Empirical data within this study will adopt a narrative analysis approach. The justification for adopting this approach lies in the fact that narrative analysis aims to identify the toes of stories told about a research phenomenon. It propagates the categorization of the to-be studied phenomenon in terms of viewpoints, constructs, concepts and structure (Felluga, 2003). The use of narrative analysis approach aims to produce generalizations of thought, attitudes, actions and their meanings related to the to-be researched phenomenon (Pradi, 1984).

In this thesis the following steps are taken in the analysis of data gathered from respondents:

- Extracts from the interviews are compiled.
- Extracts are read several times to note and highlight what is believed, what is doubted and what seems to resonate critical meaning to the phenomenon under study
- An analysis of the explicit content, the discourse, and context of each extract is undertaken so as to establish insights and understandings
- Consideration of the latent content of the stories is initiated to establish what was said, trying to be said and what was left unsaid.
- A comparison and contrast of the stories is carried out to identify similarities and differences in content, style and interpretation
- A consideration of background variables of respondents is then undertaken
- Identification of content that illustrate themes, insights and understandings that relate to the phenomenon.

4.4 Research quality: validity and reliability

Characteristics of research quality as suggested by Dubois & Gilbert highlight two general features: the strengths of the relationship between empirical evidence and theory, and the degree to which the description of how the such relationships are established to convince the reader. An evidence of research quality is to provide concise systematic research processes that are described the methodology chapter of a study, as well the establishing and providing a clear description of the adopted research method (Easterby-Smith et al, 2008). Four test of research quality: reliability, construct validity, external validity and internal validity is proposed by Yin (2009). Within this thesis, these tests will be used to analyze the research quality of the study.

- Research Reliability

Keywords synonymous to research reliability are transparency and replicability. According to Yin (2009), reliability tests seek to measure whether the same results would be reached if another researcher were to conduct the same study. In this study, by following a systematic approach as well as strict adherence to principles of transparency and flexibility, errors and bias have been minimized to a significant degree. The research process has been described in this methodology chapter in its entirety and the data correlated has been entered into a single case study protocol file. Reliability according to Saunders & Lewis (2012) stress that research reliability may be further assured if data may be replicated with consistent findings in accordance with methods of data collection. In qualitative research arguably, the ability and potential to replicate findings is rather improbable because of the rather dynamic and complex nature of the phenomenon under study and the key contexts via which the data collection techniques were carried out.

Another key manner via which research reliability has been ensured within this thesis has been the use of conflicting literature. Yin (2009) suggests that the inability of a study to take conflicting literature into account increases the likelihood that the credibility of the study will be questioned. Literature that discusses similar findings is particularly just as relevant as conflicting literature. Both tie together and increase the generalizability of the study while equally leading to higher conceptual levels and stronger internal validity (Eisenhardt, 1989).

Transparency of this study has been ensured as well as maintained as research process of this study has been described in detail within this chapter, adding to the fact that all case data has been carefully stored and is available for further analysis and studying. It is to a significant degree arguable that qualitative research methodology may never be considered as being entirely objective. However, researchers must take into account and acknowledge their own bias. Van Manen (1989) reveals that for a researcher to achieve quality within any given study involves the making of highly contextualized individual decisions and judgements. The discussion on research reliability is neatly tied together by Dubois & Gibberg who state that the goal of a quality study is to reach transparency via the reduction of degrees of complexity thus aiding targeted readers to understand the complex topics and phenomenon being studied. A quality study associated with a good case research establishes and provides a model/framework of reality and not reality in itself (Dubois & Gibberg, 2010).

- Research Validity

The construct validity concept describes the identification of appropriate operational measures for the phenomenon under study. It entails selection of right respondents, establishing objectivity in the observation of events and analysis of findings. Within this particular paper, the use of both academic focused literature and archived data as a means of gaining understanding and identifying the challenges of business model changed was adopted as secondary data. This paper has also attempted to establish a chain of evidence by providing room for target audience/readers to be able to follow and understand all derivations of arrived conclusions gathered from case data. Respondents were asked to review research results and consequently provide further or additional comments or views. In the interview session phase of the research, the researcher established a common understanding of the business model and business model change constructs by using relatively simple terms. This was aimed at avoiding any form of misunderstanding or misinterpretations of the interview questions.

The relevance of internal validity especially in a study such as this cannot be overemphasized. Internal validity refers to the ability of the researcher to establish and highlight logical reasoning behind related events and causalities. It further involves taking all causes into cognizance and carefully analyzing inferences. In light of this, prior to conducting any form of analysis, potential outcomes had been considered. Preparation for pattern matching had been equally established prior to the initialization of interview sessions thus guaranteeing internal validity of the research.

From an external validity stand-point, which aims to address the study's ability to generalize findings beyond the boundaries of research cases, findings from this thesis can relatively be generalized to be true for a sizeable number of target industry sectors and organizations. While the ability to replicate findings across other industries and organizations was not the key objective of the study, it helps validate that findings to a large degree does hold some ground. Furthermore, validity is linked with the capacity of the study to leverage on exposure to respondent's knowledge and perspectives on the phenomenon under study. Miles & Huberman (1994) state that validity is the ability to find significant insights during data gathering phase from aspects such as language. The semi-structured interviews used in this study possess the potential to garner high levels of validity based on the notion that such an interview style allows for the clarification of questions and deeper exploration of the research phenomenon with respondents (Saunders & Lewis, 2012).

5 EMPIRICAL STUDY

In this chapter of the thesis, empirical data gathered during the course of the study is presented. The section firstly presents an overview of the business model change that occurred at JUMIA.

5.1 Case study: Business model change at JUMIA

Jumia is currently considered Africa's largest e-commerce marketplace. The firm, founded in Lagos, Nigeria in 2012 with about 10 employees now boasts of dominating the e-commerce sphere across 23 other African nations with a monthly average revenue of about 100 million Dollars and 150, 000 visits per day. Originally, Jumia launched as both a physical retail driven business across several cities in Nigeria and a retail online shopping website for electronics and fashion accessories. However, the firm's original business model faced significant challenges.

In 2012, when the firm launched in Nigeria, Jumia immediately enjoyed wavering successions of patronage and significant consumer spending which was facilitated by the wealth of the Nigerian based crude-oil economy and a rapidly growing middle class. A few years down the line, Jumia's quickly acquired success and growth began to rapidly diminish. Influenced by the inventory-intensive retail model that consistently required huge infusions of capital, the pressure of a limited retail ecosystem in Nigeria, challenges of the nation's local infrastructure and plummeting oil prices that caused a dive in consumer purchasing power, the firm was faced with insurmountable challenges that many would point out was equally centered on the limitations of their business model.

Nigeria, the initial launch place of Jumia is a country of over 170 million people, a GDP per capita of 2,578 US Dollars and an expected growth rate of approximately 7.3% (IMF, World Bank). This gradually developing economy and the rapidly growing middle class was seen as the perfect opportunity for retail driven businesses such as that of Jumia to thrive. However, growing population rates implied significant infrastructure challenges coupled with daily power outages, Jumia discovered down the line that it could not run its adopted business model effectively within the Nigerian market environment.

In spite of Jumia's initial success when it launched, subsequent years saw the firm unable to align its operating and business model to adapt and fit the Nigerian market. The core of Jumia's initial business model was strategically reliant on physical infrastructure that exposed users to a new form of retail consumption, however, this operating model was not developed for stable growth and long-term adaptability. As a matter of fact, the model focused entirely on short term strategy goals that was contradictory to the mission of the organization becoming Nigeria's biggest retail firm. Jumia's initial business model had not taken two key things into consideration, the value chain which was significantly affected by Nigeria's extremely unreliable local infrastructure and the second challenge, over reliance on inventory-intensive strategy (Running warehouses and managing inventory).

Jumia identified the challenges of the old model and sought to undertake a business model change. The firm decided to switch to an online marketplace facilitated by a multi network platform. This peer to peer driven system would allow for users to be able to interact and carry out transactions with sellers that sold a wide range of products and services. More interestingly, the new platform allowed for users to comment, like and tag commodities and sellers thus resembling a social networking digital marketplace. The new model would address the two core challenges the old model was unable to handle: non-reliance of the country's local physical infrastructure, and the non-dependence on warehousing and inventory. Jean-Jacques Maikere, Managing Director of Jumia emphasized at the implementation and launch ceremony of the new model that the adoption of an entirely new operations model was aimed at providing target customers with an easy to use, intuitive, social and fun centered shopping experience. While this new model takes a lot of concepts from Amazon, Jumia specifically created its online market place to fit the African market by pursuing critical adaptation strategies to address the limitation of the old business model.

- **Business Transformation Process:**

The transformation process was initiated by acknowledging that there were critical limitations with the old model. The firm carried out an analysis of how such a limitation could be effectively addressed. Smart investments were secured to fund the first crucial years of the new model penetration and also to facilitate operation scale and consistent development. In trying to convince stakeholders why the firm had chosen to adopt the new business model, management stressed that the e-marketplace adoption would streamline complex business processes, aggregate buyers and sellers in a single point of contact, facilitate partners of the platform in enjoying greater economies of scale and liquidity but more importantly eliminate the challenge of geographical barriers which was a key limitation of the old business model. The new model should be viewed as a collaborative enabler, since it eliminates the issue of inventory and helps move the business into a process where anyone can sell any approved product under the governance of Jumia seller polices. Thus, the first stage of the transformation process was to establish that the old model was not built for long term strategies and thus come up with core strategies that would address identified limitations. Secondly, there was need to understand both consumer and stakeholders needs to be met by the "to be" business model and thus begin to communicate effectively how these needs would be met.

The next stage of the transformation process was to begin generating novel ideas on individual components of the new model. In light of the fact that the new model was a significant shift from the old one, it was pertinent that the firm established core understanding of what key components would be required to make the new operations model run effectively. Five key components were identified as key components to be transformed: value proposition, cost and revenue stream, value chain, resources and key activities. Once these key components had been identified as being the core of the new business model, the change management and business development team initiated a brain storming session on what would constitute the highlighted components and how to achieve effective and efficient alignment between all components to for a seamless system.

In the implementation stage, the firm adopted a four-phase supply chain transition model. The first phase was a “readiness analysis”. In this stage, the readiness of the firm to adopt and implement the new business model was reviewed. Factors such as the firm’s organizational environment, structure, resources etc. were critically scrutinized in this stage. Attention to the readiness analysis of Jumia was intricate to the implementation process in light of the notion that an imprecise or weak factor could lead to failure or limitations in the transition process. The “strategy planning” phase preceded the readiness analysis stage and was based on a critical examination of the firms newly adopted supply chain strategy, compatibilities, operations strategy and relationships. One of the key attributes of this particular phase was the clarification of the firm’s new e-marketplace strategies.

In the third phase of the supply chain transition model, “facilitation of the new business model adoption”, the business environment in itself was critically analyzed because it played a relevant role in the implementation process and transition success of the new business model. Jumia facilitated the transition of the new model by providing the required technological platform, standardizing all required documentation, training of staff for strategic and technical positions, building collaborative partnerships with external parties, and more importantly securing the support of top management and all relevant stakeholders.

The final stage, the “post adoption” phase involved consistent review of the transition process and identifying what components, processes or strategic stance that required re-analysis. This phase also involved the utilization of the new business model and the supply chain to deliver value and capture benefits. It is also at this time that firm begins to adapt and fine tune its structure and capabilities to align with the new business operations.

5.2 The sample

Interviews were conducted with top level management personnel. These individuals where specifically chosen as case samples because of their direct influence and exposure to the strategy of the organization.

Table 5.1

	Firm	Job Title and brief description	Interview Time (min)	Word Count
R1	JUMIA	Chief Operations Officer	16	915
R2	JUMIA	Business Development	22	1207

		Manager		
R3	JUMIA	Head Digital Services	NA	1767
R4	JUMIA	Head Financial Services	NA	1987

5.3 Empirical data

In this section, a description of the findings from the conducted interviews is presented. The findings have been organized into corresponding themes that the thesis sought to test. While the interview questions aimed to establish differing views of the respondents, the questions were consistent and aimed to ultimately cover the to-be tested themes.

5.3.1 Understanding of the business model concept

Given the parsimonious view of the business model concept and the non-definitive approach within academic literature, the first research question aimed to uncover insights and provide critical understanding from respondent view point of how their various organizations approached the business model concept and construct.

Respondents were asked to briefly explain the current business model of their firm and to state what components they would classify as being the most significant within the organization's business model.

- Customer centricity or value proposition

The value proposition or customer centricity element was mentioned a significant number of times across the four interviews conducted. In actual fact, it was the most frequently mentioned element mentioned during the entire course of speaking with all respondents. According to R1, "*the one most important factor of the firm's business model was to provide a trusting and rewarding experience for its esteemed customers*". In similar fashion, R2 stressed that "*the core of every strategy of any business was always focused on a single key goal: delivering value to the customer".* When asked which component of her firm's business model she considered the most significant, R2 replied "*I would rightly say…….user centricity which means our value proposition to our target customers. I consider this to be the most significant component of our business model because every other component is driven or influenced by our goal to create value for the customer. Only when the customers' needs have been identified is when a firm can begin to strategize on issues such as what resources need to be expended to meet these needs, what sort of channels should be adopted to get the proposed value to the customer etc .So again, I hold a strong belief that it is the value proposition that should come first in any business model then other components will begin to take shape".*

R4, who said before joining the current firm, he had worked with several innovative driven firms across several sectors, referred to the business model as being centered around customer thinking. He emphasized that "*business models are aimed at making the customers lives easier. This is primarily the life force of the organization"*

R3 equally spoke quite strongly on the concept of customer centricity, accentuating that "*the key reason that the business model was changed was not because we were not making profit, because we were, however we were consistently think of better ways to deliver great shopping experience to our customers",*

Based on the excerpts above, the insight that focus on the customers of any business venture is not just perceived as a component of the business model of that firm. Rather, and from the view point of the respondents, the customers are in fact the life force of the business model construct.

Value proposition/customer centricity was a theme that was clearly and strongly communicated during the interviews. A large part of the responses presented by respondents were framed around the context of delivering value to meeting customer needs and desire. The customer centricity philosophy was so entrenched that respondent agreed that the key reason for the change of the business model from the old to the new one was to meet rising customer demands that could not invariably be met via the old model.

During the interview sessions with the four respondents, it was quite evident that in the design of an organization's business model, the customer should be positioned as the core component around which other business components should be framed.

- The Value/Supply Chain

Another key component that was consistently mentioned during the interview was the value chain concept. Respondents agreed that it was a significant part of a firms operating model. R3 mentioned the interconnectedness of the components of business models and how the value chain was a facilitating component of the interwoven system by stating:

"*the value chain is like a facilitator of all other components of the business model. It represents how value is delivered to the customer. If you look at the value chain from a business perspective, then you will see that it is a combination of both strategy and operations. Firms ultimately have to consistently think of how to configure pieces of the business and then deliver it to the customer. They way a firm goes about equates to putting the customer at the center of the business model."*

Among the four respondents, there was a definitive consensus that the value chain was not just a fundamental element of the business model, but was key to the entire operations model of the business venture and getting the value chain strategy right would almost guarantee a sustainable business model. R4 discussed how the business model of the organization was developed around a three-tier customer centered journey. The insights exhibited by respondents highlighted the interconnectedness between the varying components of the firm's business model.

While not every respondent specifically explicated to a large degree the significance of the value chain, the broader part of their conversation on the value chain construct did address the notion that the value chain was considered an integral and effective strategic component of the organizations' operations model. Responds further agreed that the value chain was the means via which the organizations was able to differentiate itself from its competitors. The value chain and the significance of its construct as a key component of the business model emerged as a compelling factor of how organizations are structured in an aim to efficiently deliver value to their target audience.

- Revenue Logic

How a business venture gets income from value delivered “revenue logic” was mentioned by some respondents as essential to the sustainability of any business. R4 stressed that *“...most businesses can be drilled down to how income is generated. It is the reward you get for delivering invaluable experience to the customer”*. R3, while emphasizing on the relevance of the revenue logic as a key component of the business model, stated *“while most business owners will claim that user centricity is the single most important element of their operations model, the stakeholders and those who invest in the business are more concerned with the fact that the company makes good profits…it is even the weight of profit made that determines if the firm is actually delivering true value to the customer.”*

Revenue logic implies what strategies are employed in the acquisition of income and ultimately profit. Respondents were quite clear about the revenue logic being an integral component of the business model. One respondent even referred to the revenue logic as the “why we do we do component” of the business model.

5.3.2 Barriers of business model change

This research question, being the core research inquiry of this thesis, sought to understand those factors that hinder the undertaking of business model change or transformation.

Respondents were requested to discuss as elaborately possible their experience of barriers faced prior to undertaking the business model change as well as describe the nature of subsequent challenges that were uncovered during the change process.

- Resistance to the Transformation of the New Business Model (Attitudinal Barriers)

The resistance to the change of the old business model emerged as an overwhelmingly critical barrier of business model change. All respondents during the course of narrating their personal experience consistently mentioned this barrier as a significant hinderance to initiating business model transformation.

All respondents in sharing their experiences on the resistance to change barrier emphasized that it was surprising the level of resistance that came up especially in light of the fact that those who were against the change had no viable argument against the adoption of the new business model. They were simply reluctant and uncomfortable with the uncertainties the to be model was geared to usher in. As R2 explained “*we lost people simply because they were uncertain where they would fit in the new scheme of things. Attitudes of certain staff changed significantly and things became a we versus them issue.”*

R3 stated “*shifting resources in terms of knowledge and acquired skills away from an operating model that one is familiar with and has always worked or being the basis for a significant part of one’s positive appraisal is stressful, it requires a huge cognitive shift not just on the part of employees but also on the organization, thus the reason for the resistance.”*

Respondents pointed to the notion that it was the uncertainties of the impending change that brought about the high degree of resistance from several parties. They indicated that such uncertainties require that employees take risks and expose themselves to consequences they might not be quite comfortable with.

- General Complexity of the Business Model Change Construct

Complexity of changing the business model emerged as a significant challenge for the adoption of business model change. Respondents were of the strong opinion that the interconnected nature of the components of the business model, transforming parts or all and then integrating them into one seamless unit becomes a complex tax to undertake. R2 stated that "*the technical understanding, and other resources that will be expended in simply trying to understand what should go into the new business model, and why it should be there establishes a level of complexity no one will be naturally willing to undertake.*"

Coupled with the other inhibitors, such as limited resources, the degree of complexity that is involved in transforming a firm's business model might often be insurmountable for firm's seeking to change their models of business operations. R4 elaborated on this ideology by stating "*A change of the extant business model of any firm is a significant leap into an unknown and uncertain territory. It is almost impossible to forecast probabilities on the outcome of the change and what is even more difficult is the construction of meaningful scenarios. This makes the undertaking of business model change really complex*."

- Leadership Barriers

Another critical obstacle that was highlighted by respondents was the notion that most times, no single individual possesses the effective authority as well as capability to lead the change process, especially when such changes are radical and interconnected. R2, when discussing this barrier specifically emphasized that if the firm had appointed a leader who understood the change process and its intricacies, transitioning to the new model would have been easier. "*Business model change at most organization requires an aligned leadership team or personnel that is exceptionally skilled at both people management and change process management, a lack of this implies that top managers may subtly counteract proposed ideas that revolve around the intended change thus making it even harder to adopt.*" R1.

- Lack of internal Firm Capabilities to Propel the Change Process

The lack of managerial know as a barrier to business model change was mentioned by some respondents. While not discussed elaborately, respondents who cited this barrier stated that inadequate understanding of the firm's current business model and it underlying assumptions establishes a roadblock to transitioning to the new model. Thus, when a firm lacks the capabilities and knowledge about how to experiment with alternatives, then new business model ideas can in no way be effectively evaluated and consequently implemented. R2 made this notion clear when she was asked about her experience with the change process. She stated "*Firstly we realized that we were a tight knitted retail firm. What this means is we did not have significantly knowledgeable people to push the entire change process. What we had were people who simply knew how to sell stuff.*"

If firm capabilities do not entail successfully initiating, implementing and managing change processes, then business model change faces significant pushbacks.

- Bias of the Current Business model

Another critical cognitive barrier for business model change, as emphasized by the respondents during the interview was getting past the current business model. The dominant business and operations model, having been deeply rooted in the DNA of the organization consistently manifests itself. R2 shared a similar opinion when she talked about this barrier. She stated *"at one point when the platform was up and running, we still had to continue with the physical and online store. We had initially set a date to phase them off. However, that day came and we couldn't just do it. So, we continued to run the two modes of business for close to two years."*

This challenge usually manifests itself in such a way that information flow within the organization has a large tendency to be reacted to, interpreted and processed based on the old business logic because certain players are still stuck with its ideology and find it difficult to get past it, sometimes it might be the general organization in itself. R4 stressed that, when we launched the new platform and operations model, most ideas that were brought up by business development team members still in some way resonated around the old model. Senior management was equally guilty of the same phenomenon, as they simply rejected ideas or information that did not concur with the old logic simply because they had not completely bought into the system of things.

- Organizational Structure and Culture

This barrier manifested is several forms, some forms were rather straightforward while others a bit complex. Firstly, R1 stresses that "*the focus on any to-be adopted change process has to start with top management and then consequently be implemented throughout the firm. In our case, when the idea of changing the business model was first hinted, management was really complacent about it. The main reason in my opinion is simply because, as at then we had not adopted a culture of being innovative and adaptive. Everyone wanted things to stay as they were despite the fact that the environment where we were doing business was consistently changing."*

R2 gave equally revealing insights on the issue by saying "*when an organization does not support individual or entrepreneurial thinking and is structured to follow as strict framework of doing things, then change is quite difficult to initiate. It was a great challenge to get people on board the change idea because the firm just isn't structured for such radicality*"

- Financial Barriers and Long Implementation Lead Time

Respondents equally agreed that the cost of transforming the organization's business model was a huge barrier. Bearing in mind that the firm was not doing as well as it had when it first launched, financial resources was deemed scarce and stakeholders were uncertain about investing in any project with no already known outcome. R2 talks about this when he says "*Well firstly management was divided as to if it was the most innovative plan the organization could have come up with. Then there was the issue of how much money was going into the project, how much time it would take and which personnel were going to see the project through"*

5.3.3 Addressing the barriers of business model change

Respondents were asked to discuss how the above-mentioned challenges were addressed. The aim of this question during the course of the interview was in a bid to uncover the strategies that aided firms in reassessing and transforming their models of business, but more importantly to provide answers to the second core research question: *How can the challenges identified in the above research question be mitigated?"*

Fig 5.3 illustrates graphically, emerging finding based on the responses gathered from the interview.

- Change-Supporting (Innovative) Firm Culture and Structure

A firm with an environment that is designed to support and propagate innovation and change was sighted as one of the most significant attributes of mitigating the challenges of undertaking business model change.

Respondents reflected that the culture and structure of an organization, if established to accommodate and promote entrepreneurial thinking, then innovative ideas would be the norm of the organization. This notion was articulated by R1 when he summarized the following:

"*One of the key things the external collaborators said was that we had to change our strategy of following a specific framework of doing things. Our firm culture was just to rigid. They advised us to embrace innovative and adaptive thinking."*

As highlighted by another respondent, organizational structure and culture promote or mar the sort of thinking that is required for big challenges faced by the organization. Firms with intricate structures, complicated bureaucratic processes hinder innovative thinking and promote organizational inertia that slow down or ultimately hinder smooth transitions of change processes.

In similar light. Organizational culture must embrace elements of open communication, and consistent rethinking of existing ways of getting things done. P3 emphasized this by saying: "*with strong communication strategies and a promise of consistent involvement, we were able to reduce resistance to the change by a high degree."*

- Strong Leadership and Management Know-how

These two elements as means of mitigating the barriers of business model change emerged from the interview finds as interchangeable factors. Respondents who cited this as an integral mitigator to business model change barriers, agreed that the transformation of the operations model of their business required a top-down approach. Respondents perceived such a transformation as being critical to the success and sustainability of the organization and thus, it required a leader who could address potential threats and challenges and drive the change.

Each respondent stated in their interview what role they played in the adoption and transition process and could not but overemphasize how the influence of a knowledgeable management team would have made the change process easier and seamless. P3 stated

"*In solving the obstacles of the business model change process, management simply needed to understand their capabilities and influence on such a big project, they had to assume change-leadership role and efficiently drive the change process"*

The capacity of top-management to imagine a different way of getting things done and thus push for the desired change throughout the entire organization was perceived as being central to effectively addressing challenges that emanated during the change process.

- Engaging Collaborators

Engaging collaborators both externally and internally was identified as a solution to the barriers of business model change. R3 stated that engaging external collaborators in the value chain and change process was significant in breaking several barriers and inhibitors of business model change. He stated:

"*organizations that set themselves up for strategic partnerships open themselves up for sustainability. This was the case with our issue, we kept hitting one challenge or the other till we brought in people who had experience with change management. It was then we saw several challenges diminish"*

This respondent's sentiments were grounded on the notion that such partnerships or collaborations provide room for organizations to focus on running core business operations rather than throwing every resource at the change process. R2 equally raised a similar theme and articulated the relevance of bringing in collaborators. When asked what the firm did to try and address the challenges she had mentioned, R2 responded thus:

"*Firstly, we had to bring in external parties to handle things. Someone who would lead the change process. We brought in a team from KPMG."*

6 DISCUSSION OF EMPIRICAL DATA

Business model transformation holds great potentials of creating value for all parties involved (Sosna et al, 2010), and as many significant studies have affirmed, such change often guarantees sustainable competitive advantage for organizations that undertake them (Brown, 2008). In light of the notion that the business model change phenomenon has become of significant interest to organizations hoping to adapt to changing market environments and particularly the growth of this field of research in academia, this thesis sought to add to existing literature on the business model transformation concept by investigating the barriers that stopped firms from undertaking the business model change process.

The author of this thesis was of the opinion, that establishing an understanding of the factors that inhibited the undertaking of shifting from a traditional business model to a platform driven model would assist organizations and its stakeholders through the various processes involved in such a transition. While other relevant academic studies have sought to explore the drivers of business model transformation (Bereznoi, 2014; Gassman, Frakenberger & Csik, 2014; Wirtz et al, 2015), this particular study endeavored to address a more nuanced phenomenon of the business model change concept.

Based on the two core research questions outlined in the earlier sections of this thesis, the study was able to gather insights via empirical data collected from interviews. The research questions and subsequent insights are discussed below.

6.1 Research question 1: Is the business model concept well understood by firms and organizations?

Insights emerging from the empirical data gathered from the administered interviews points to, and as is in unison with the literature, that the business model concept is in a manner varying, all-encompassing and multifaceted (Zott, Amit & Massa, 2011; Eriksson & Penker, 2000; Osterwalder et al, 2005).

As was established in the interviews, respondents who cut across varying spectrums identified certain core elements of the business model concept which from personal opinion were essential features of any business venture and significant components of the business model of any organization. Components such as revenue stream, value chain and customer centricity (value proposition) were discussed by respondents in multi-layered yet interwoven manner. These elements were also the key things respondents identified as what their firms had tried to alter when they undertook business model change. More importantly, respondents were able to emphasize that neither of the outline components on its own constituted an ideal or successful business model, rather the linkage of such components formed the framework of any firms' business model. This notion identifies with a framework postulated in a study by Gassman et al (2014) who proposed a holistic approach in the development of business models.

In the interviews, customer centricity and value proposition were used by respondents interchangeably. For a majority of the respondents, critical understanding of the customer, their desires or need and consequently placing them at the core of the business model of the organization was viewed as crucial in delivering services or products that held compelling value proposition. Perspectives identified within the literature reviewed within this thesis was validated by respondents via their confirmation that the ability of an organization to identify a target market played a significant role in the design of that firms' business model. Thus, insights gathered from our empirical data does support opinions accentuated in literature because it was confirmed that deep understanding of the customer centricity construct is a relevant and key element of business models and as such play a huger ole in the success of business model transformations (Chesborough Rosenbloom, 2002; Afuah & Tucci, 2001; Hamel, 2000; Teece, 2010).

Equally identified from the empirical data gathered, the value chain construct was highlighted as a relevant feature of the business model concept. The value chain construct was identified by respondents as a sustainable competitive differentiator. This statement implies that an understanding of the value chain of any business venture would be the most ideal means of delivering satisfactory products or services to the target market. Certain respondents were further able to break the value chain construct into sub-components. Financial assets, partners and logistics were some elements that were mentioned when some respondents tried to explain the value chain construct thus aligning with information gathered within some of the literature (Morris et al, 2005).

Sustainable revenue stream was another key element mentioned by respondents. A significant number of respondents mentioned that their firms were consistently looking for new and innovative ways to transform/change their revenue streams. As would be expected, a common consensus among respondents was the notion that a firms' inability to generate sustainable revenue and consequent profit margins after it had delivered value to its target market would be detrimental to such a firm.

An analysis on the findings validate the interconnected and multifaceted nature of the business model concept as described by core literature on the subject matter (Bereznoi, 2014; Magretta, 2002; Gassman et al. 2014). In their response to the inyerview questions, respondents discussed these core features of the business mode concept interchangeably, as part of a more dynamic and broader view point of the topic under investigation. This led to the perception that in the design and development of an ideal business model, efficient linkage between these varying components would be integral in the final implementation stages. Such insights resonate with Magrettta's (2002) and Osterwalder's (2000) propositions that the business model is a framework or system that encapsulates varying individual components that are all linked together.

While key insights to the business model concept gathered from the empirical evidence did shed more light on the nature of the business model, it equally raises various details on the complexity extant in the transformation of the business model and what aspects firms would need to critically manage when engaging in business model change.

6.1.1 Conclusion

Overall empirical evidence suggests that respondents possessed a clear and concise understanding of the business model concept, its components and its functions. Regardless of the fact that several academic driven studies had not come to unison on the exact components that constituted the business model, it was astute and quite surprising to see that respondents shared distinct similarities as to what constituted the business model even though they belonged to varying industry sectors. Even though it is quite debatable that certain organizations of the respondents had undertaken far more radical business model transformations in comparison to others, there were no significant disparity that emerged from the responses and understanding of the business model construct amongst respondents. All respondents shared suitably defined, uncannily synonymous and structured responses.

6.2 Research question 2: What challenges do firms encounter when transitioning or adopting the platform business model?

The consensus that the undertaking of business model transformation holds significant potential for resulting in value creation and sustainable competitive edge for most organizations cannot be overemphasized (Brown, 2008; Sonsa et al, 2010; Markides & Sosa, 2013). Nonetheless studies on the phenomenon equally assert that it is complex and rigorous process that possess high rates of failure (Pauwels Weiss, 2008).

Being the core of this research study, identifying the factors that inhibit the undertaking of business model change or successful transition of old business models to new ones, the above research question was aimed at establishing an understanding of the practical realities encountered by organizations in their bid to transform their business models. Emerging themes and insights gathered from empirical data are discussed below:

- **The complexity attached to the business change process is a strong inhibitor to business model change**

Empirical evidence gathered is suggestive of the notion that in most instances, business model transformation is a complex, sometimes insurmountable feat that requires the consideration of a variety of interconnected components.

Respondents accentuated that in spite of the appeal and all the perceived benefits attached to business model transformation, the undertaking is significantly complex and prone to failures. It was also stressed that even in situations where all relevant enablers are put in place, the process of business model change is still encapsulated in complexity and uncertainty. This complexity, to a large extent is as a result of the difficulty in ensuring alignment of all the interconnected components to for a seamless efficient system. Our findings support the contention of available literature that a large percentage of business model change, transformation or innovation fail because stakeholders fail to take into account or understatement the interconnectedness and ensuing complexity of business model change (Andries & Dabeckere, 2007; Baden-Fuller & Mangeematin, 2013; Klang et al., 2014).

Respondents reiterated the notion that when designing, developing or undertaking the adoption of a new business model, a key way to address the complexity barrier would be to approach the change process using iterative experimental strategies that test the commonly held logics and assumptions that exist within the organization. By adopting such as approach, organizations establish an experimental process that consistently tests the idealness and fit of the components of the new business model and consequently the new business model itself. This strategic flexibility approach thus becomes a significant firm capacity as it allows room for the organization to not simply just feel comfortable with iterative adaptations but it holds the potential for firms formulate and establish the most optimal business model at the end of the change process.

It is vital that organizations take into critical consideration the complex and interconnected elements of the business model construct prior to undertaking business model change. Such strategic considerations will guarantee that a change process layout that takes into account the varying components and impediments associated with the complexity of changing a business model is developed. Adopting experimental strategies and allowing for flexibility and continual adaptation was highlighted as a key measure of mitigating the complexity barrier of business model change. The accentuations of the respondents during the gathering of empirical data is in accordance with reviewed literature on the topic of experimentation being the key to addressing complexity challenges associated with business model transformation (Sonsa et al., 2010; Teece, 2010).

- **Organizations with an established business model may struggle with business model change.**

Empirical data revealed the reality of dealing with conflicts that ensue while attempting to implement business model transformation. Respondents pointed to the fact that the issue of formulating a new business or operations model in parallel with a functional existing model was a huge challenge to the business model change process. This barrier is identified in the studies of Chesborough & Rosenbloom (2002), Mezger, (2014) and Berends et al., (2016).

In most situations, this business model change barrier was identified to have originated from the perspective that the existing model of business was functional and thus the necessity to alter or transform the current business model was not needed. This barrier more than often is seen in organizations that has built up a significant reputation or market share within its business sector. Hence the impetus or need for a transformation of the firms existing model of business was yet to filter down to the relevant individuals that would otherwise had been involved in initiating or implementing the change process. Reviewed literature does recognize this ambidexterity challenge as a potential inhibitor of business model transformation. Existing literature also points to the fact that this barrier is usually a by product of the structure and culture of the organization (Amit & Zott, 2001; Christensen & Raynor, 2003).

As highlighted by literature, the ambidexterity barrier that ensues from conflict between the existing business model and the new one should be identified early in the business model transformation process and mitigated strategically (Chesborough &Rosenbloom, 2002; Mezger, 2014). While certain conflicts may be perceived as being a part of the business model transformation process, it is imperative the organizations need not ignore the potential advantage of leveraging on such resistance to test the to-be business model thoroughly. Viewing such resistance as a critical motivator could aid organizations uncover synergies that may exist between the existing and proposed business models and thus establish a competitive edge that is sustainable for the firm.

- **Inadequate Leadership**

Respondents highlighted the issue of leadership gap as another critical inhibitor to the transformation of business models. Existing literature acknowledges the fact that without a charismatic and skilled leader, the business model change process becomes more complex and complicated to achieve (Doz & Kosonen, 2010). When management is unwilling to lead, reimagine and take all necessary risks involved to drive the change process, transformation of the model of business becomes insurmountable.

The focus on business model change has to begin at the top with top level management, and be implemented across the entire organization. For this to occur, individual with strong leadership and change management skills have to step up to drive such radical change. Inadequate leadership and management support in business model initiatives equates to significant challenges. In line with what was revealed from the empirical data gathered, academic studies equally stress on a similar mantra: When there is leadership gap and little or no support from top level management, the undertaking of business model transformation or innovation is significantly hindered (Chesborough, 2007; Comes & Berniker, 2008; Santos et al., 2009).

- **Attitudinal Barriers (resistance to change) is a strong inhibitor to business model change**

Risk assertive attitudes and other change resistant attitudes by stakeholders of the change process was identified by respondents as a key challenge to the undertaking of business model change. Such attitudinal inhibitors according to reviewed literature can be often directly traced to the corporate structure and culture of the organization (Chesborough, 2007). This barrier was cited as one of the most critical inhibitors of the business model transformation process by the respondents because it resonated across every phase of the change process. Chesborough (2007) equally emphasized that attitudinal barriers arises in light of the fact that many of the managers have reached the current position via existing operations processes and have become quite proficient at their daily professional work routines. As such there is significant resistant to any form of change to their already known working routines and these individuals will do anything to defend the existing business.

- **A lack of commitment of adequate resources will cause business model change to likely fail**

Empirical data gathered revealed that a failure of organizations to commit and dedicate adequate resources to the business transformation process was a critical inhibitor of the change process.

Firms that could not initiate, develop, design and implement new business models in the light of changing market environments and sustainability challenges perceive inadequate allocation of resources as on of the core barriers they faced. Schneider & Speith (2014) support the highlighted findings in their study that proposes that the flexibility of an organization in efficiently distributing its resources in a bid to adjust organization strategies is imperative in guaranteeing that business model change processes are steered in the right direction.

Resources, be it man power, knowledge or financial, feature as a critical component of business model change process. It is therefore necessary that such change process include a high degree of commitment of the required resources that would drive and inherently support the change. Findings from both the literature and our empirical data show that failed business model change undertakings often result from inadequate allocation of the required resources to push the initiative through. The literature further states that in later attempts of business model transformations, organizations have had to establish and create autonomous business units to mitigate and reduce to a significant minimum, the conflicts that are associated to resource allocation.

6.2.1 Conclusion

In asking the research question: What challenges are associated to business model change? This study sought to gain extensive and deeper insights into the elements that impede or inhibit business model change in organizations. Presented with the value-generating characteristics of business model transformation, insights gathered from an exploration into the inhibitors that impede the pursuit of business model change may prove significant to practitioners and academics considering that knowledge of such barriers allows for appropriate navigation of the change process.

As empirical data and consequently the findings illustrate, the pursuit of business model transformation is an intricate, dynamically complex undertaking. The business model change undertaking is fraught with interconnected and multifaceted dynamics that exist as whole systems and yet are single components. Findings from this research question point to the notion that when embarking on the pursuit of business model change, organizations must remain cognizant of the varying factors associated with the change process and thus develop efficient strategies to manage these multitude of factors accordingly.

6.3 Research question 3: How can the identified barriers to business model change be mitigated?

Identifying the strategies for mitigating the identified challenges of business model change could aid organizations in the development of capabilities that could drive a seamless business model transformation undertaking. The above research question aimed to uncover the underlying factors or features that propagated successful business model change within organizations.

- An organizational design that imbibes a structure of flexibility and culture of change/innovation is a strong propagator of business model change

When an organization is designed around open communication and a culture of innovation then changes processes are easier to adopt. Respondents cited that the culture and structure of an organization may allow for successful business model change. Findings further accentuate the fact that organizational design centered on accountability aided the successful redesign of their operations model.

Academic literature supports these findings by noting that the lack of appropriate organizational structures and well-designed changes processes pose a significant challenge on the capacity for such a firm to undertake successful business model transformation (Santos et al., 2009; Teece, 2010). In other similar studies, organizational culture was cited as a critical component that influences how skills and capabilities are utilized towards successful business model change (Bock et al., 2012; Teece et al., 2016).

Organizations need to adopt a culture or operating model that favors innovative thinking and involvement. Having a separate group only committed to the business model change initiative should be seen as an unideal strategy because resistance to the change will be higher from individuals and business units external to this group. Everyone in the organization should be able to get involved with the change process. Management should equally ensure consist open communication of steps already undertaken and what processes are within the next phase. It is also pertinent that organizations rethink structures that articulate information and innovation barriers where middle management serve as gatekeepers who employees must go through to present ideas that are then passed to upper management. Organizations are advised to imbibe a structure and culture where change is perceived as a positive strategic move rather than a process fraught with uncertainties.

A culture of consistent, continuous improvement and review was equally found to be a significant precursor to mitigating the inhibitors of business model change. As declared by Teece et al., (2016), "as inventors view the world differently, so must managers."

Attaining sustainability requires continuous review of the business model change strategies. Not simply because of the dynamism or disruptive nature of today's markets, but also proactively, as part of reflective strategies. A culture of consistent review of an organization's operations of business compels firms to implement business model transformations in a more controlled structured environment.

- Strong Leadership and Management know how mitigate the barriers of business model change to a high degree

In line with existing literature, empirical data and findings point to relevance of strong leadership in driving business model change process. Respondents were resolute on the ideology that apart from strong leadership, the pinnacle of business model transformation is pillared on a skilled management team that understand the significance and intricacies of the change process.

Rethinking models of business in an organization not only relies on courage and key capabilities to push such change through. Strong leadership is thus required to not only reimagine and drive innovation, this quality is necessary to address the risks and resistance linked to business model change.

The significance of leadership in the pursuit of business model change cannot be overemphasized. Empirical data and findings from literature point to failed business model change undertakings because there was no one or group of individuals to assume the leadership roles necessary for driving the change process. While the leadership gap being a critical inhibitor of business model transformations might be perceived as innocuous to some, practical experience point to the fact that it is a critical success or failure factor in business model change within any organization

As emphasized by Teece (2016), Leadership actions and decisions to a high degree is a strong determinant of how organizations create, shapes and deploys capabilities. When this is properly done, it leads to innovative combinations of resources driven by profitable value-capture mechanisms. Organizations are encouraged to take heed of the "strong leadership" factor when undertaking business model transformations.

- Strategic collaboration mitigates barriers and accelerates successful business model change

Partnering with external collaborators to leverage on their know-how in a bid to accelerate the business model transformation process was an enlightening yet interesting finding. In today's fast paced business environments, the ecosystems of industry sectors are becoming so interwoven and interdependent that it has become pertinent that organizations look to leveraging flexible firm structures and begin to view collaboration as a medium via which sustainability and competitive advantage can be built.

Empirical data suggests that firms are cognizant of the potential that can result from collaboration in varying business areas and business model transformation is no different. Academic literature supports the use of collaborators as a propagative tool for driving business model change processes (Bock et al., 2012). Strategic collaboration facilitates greater knowledge sharing, provides useful insights alien to the firm and drives novel practices (Bock et al., 20102).

Respondents articulated that a large portion of the barriers to their business model transformation initiative disappeared when external collaborators who were experts with change processes were brought in. Sometimes organizations are not structured to accommodate radical changes within their firm structure. Bringing in partners with the necessary know-how and acumen to propagate the change process

6.3.1 Conclusion

Identifying how the barriers of business model change could be effectively mitigated and addressed aims to provide firms with an understanding of the necessary components that could facilitate the design, development and successful implementation of new business models.

Finding reveal critical insights by identifying three core elements: strong leadership, leveraging on the expertise of partners and appropriate firm structure and culture as being the critical elements firms need to consider when contemplating a redesign of their business model. As the empirical data suggests: Success of the transformation or change of an organization's model of business simply does not result from a great ideas and brilliant business model design, rather, the effective and efficient management of all surrounding factors is key to successful business model change.

6.4 Analysis

Findings indicate that business model change is primarily driven by an organization's desire to ensure sustainability by adapting to changing market environments. This resonates the contentions of Markides (2006) who stresses that the dynamism of market environments has lead to organizations adopting business model transformations as a means of remaining competitive.

The capacity of organizations to identify changes in their markets and structure their operations model to adapt to such changes has become a necessity, yet organizations find it difficult to undertake such business model adaptive strategies because of the general complexities associated with the pipe to platform business model transition.

As such it was imperative that this thesis sought to address the key reasons why firms were not jumping on the band wagon of business model change which both academic literature and industry experts emphasize to hold great benefits to the continued growth of firms. The core research question asked to identify why firms were holding back from such beneficial transition was: ***What challenges do firms encounter when transitioning or adopting the platform business model?"***

The major goal of this question was to firstly identify and then understand the barriers that firms encounter when transforming the business models. The second key question: ***How can the challenges identified in the above research question be mitigated?"*** was aimed at identifying and examining the practical realities of how organizations deal with the identified inhibitors.

General findings indicate the following. Firstly, internal conflict with the current business model while trying to transition to the new model of business arose as a key barrier to the overall change process and had significant impact on the other identified barriers. The internal conflict factor viewed as resistance to the change was identified as the consequence of the view that the current business model was still functional and the change initiative was not required. As suggested by academic studies, the conflict that ensues between the current and "to-be" business models should be identified early in the transformation process and effectively managed (Chesborough & Rosenbloom, 2002; Mezger, 2014). While what the literature does emphasize is sensible, the simplicity of the notion might sometimes not fit every organization. Deciding whether the "to-be" business model will be implemented in parallel with the existing one to allow resistors gradually make a cognitive transition is not only a challenge from a resource standpoint (because bot business model will require organizational resources concurrently), but this idea requires extensive strategic thinking in light of the fact that such a decision will have long term impact. This was evident in the case of the analyzed firm in our case study. Choosing the right trade-off between the new and old models may hold potential for success. A wrong strategy may bury the transition initiative within organizational hierarchy and further cause resentment even among those who initially supported the change.

Secondly, Barriers to business model change arise as a result of the dynamism, multifaceted nature and complexity of the business model change process. The difficulty of ensuring alignment among all the interconnected components of the model might prove insurmountable for most firms. These findings support the contention of the literature that a large majority of the failures to initiate or implement a new business model was due to organizations underestimating the complexity of business model transformation (Andries & Debackere, 2007; Baden-Fuller & Mangematin, 2013). As earlier discussed, an experimental, iterative approach was found to be critical in the mitigation of this complexity barrier. To this point, organizational strategic flexibility is deemed a vital firm competence to adopt and foster because it provides room for the organization to feel comfortable with iterative continuous adaptation while designing and developing a business model that best suits the organization. This notion is equally in-line with the ideologies of the studies of Sosna et al., (2010), Morris, Schindehutte, & Allen (2005) and Teece (2010).

What this thesis suggest is that business model transition processes should be designed, developed and implemented in such a way that the different components and complexity factors be taken into serious considerations. Organizations seeking to undertake business model transitions should also imbibe a culture of flexibility via the use of experimentation strategies that may aid in overcoming the identified impediments to the design, development and successful implementation of the new business model.

6.5 Reliability and generalizability of findings

Considering that the current research on business model change and the inadequacy of comprehensive knowledge of the inhibitors encountered by organizations, this empirical investigation sought to explore these challenges. The single case study has shed light on this phenomenon in varying ways. In this section of the thesis we discuss the reliability and generalizability of the findings.

- Reliability

In qualitative research studies, reliability refers to the exact replicability of the processes and findings of a study. Yin's (2009) test for reliability measures if the same research will be attained should some other researcher undertake a similar study. In this thesis, errors and bias have been minimized to a relative degree by following and interpretative and abductive approach to the analysis of the data. Furthermore, ensuring to the principles of transparency and flexibility has been a cornerstone of the entire research process adopted in this study. The research methodology section of this thesis highlights the entire research process and data gathered from the case study has been stored in one case study case file.

To improve reliability of findings presented in this thesis, the use of both conflicting literature and literature that discusses similar findings has been adopted. The use of conflicting and synonymous literature was aimed at tying together the credibility and generalizability constructs of findings so as to establish stronger internal validity and ensure a higher conceptual level. Transparency has been maintained as the case data material is available upon request for further examination and analysis.

However, it should be taken into consideration that a researcher can never be entirely objective, it is equally imperative that biases in research be acknowledged and recognized. As Van Manen (1998) states, "to achieve research quality involves the making of highly contextualized individual decisions and judgements."

The key goal of reliability is to attain transparency via the reduction of the levels of complexity of the study and thus aid audiences to easily navigate the complex topic under study. These have been relatively achieved in this thesis.

- Generalizability

A pragmatic approach to assessing the generalizability of a qualitative research study is to adopt a similar criterion for validity. While the validity of the study findings has been ensured, it should be articulated that empirical data collected within this study was not directed towards the attainment of generalizable results, which may be relatively difficult to find when exploring the challenges of business model transformation. This is confirmed in academic literature that identifies the difficulties examining and analyzing the impediments to transformations of models of business in general terms, since each case reveals its very own exclusive peculiarities. This might also present an understanding as to why studies on the phenomenon are yet to reach a consensus on the definition and framework for business model change.

The drawbacks to the generalizability concept of this thesis from the small sample and single case study is recognized and further studies of other cases are clearly required if the findings presented within this study are to be deemed generalizable. It is pertinent that further evidence from empirical data be gathered as the investigation carried out in this thesis reflects the perspectives of one firm and very limited sample space. In light of the fact that the barriers of business model change possess subjective characteristics, identifying them via the opinions of the respondents interviewed were based on the attitude and traits of the respondents. For instance, R2 came across as a rather optimistic individual, and as such their view on the challenges identified and subsequently the solutions to the problems were certainly filtered by her optimistic personality trait.

7 CONCLUSIONS

In this chapter, the practical implications of the theoretical conclusions are presented. We equally delve into proposals for future research and finally discuss the limitations of this current study.

7.1 Key findings

This study validates the notion that business model transformation is an intricate and complex pursuit. The undertaking of a transformation of an organization's model of business requires that multifaceted components and resources be effectively managed over a period of time. This study aimed to understand three key questions relating to how firms understood the business model construct, what challenges posed critical problems to successful transition to a new business model and how firms addressed and mitigated such challenges. A summary of the outcomes to the research questions are presented below:

RQ1: Firms agree that the business model is interconnected, multifaceted and dynamic

In consensus with reviewed academic literature, this study revealed that the understanding of the business model construct is one that includes varying interconnected components that in unison, function together to deliver value to that organization's customers (Eriksson & Penker, 2000; Zott, Amit & Massa, 2005; Osterwalder, Pigneur & Tucci, 2005). Respondents identified the critical components of the business model to be centered around customer centricity (value proposition), the value chain and revenue logic, which interestingly fits with a business model framework proposed by Gassman et al (2014). An understanding of the multifaceted nature of the business model was also evident during discussions with the respondents. They spoke about the characteristics of the business model interchangeably which in certain view is illustrative of the holistic considerations a firm must undertake in the re-design and transformation of it's business model.

RQ2: Inadequate leadership, complexity of the business model, resource allocation issues, conflict between the old and new model, and resistance to change are critical impediments to successful business model transformation

The goal of this research question was to identify and thus understand the challenges faced by organizations when changing their models of business. The study identified seven key challenges that inhibit successful implementation of business model transformation. These challenges include: general complexity of the designing and implementation of the new business model, inadequate leadership, ambidexterity challenges, bias of the old business model, resistance to change from stakeholders, financial barrier and long implementation lead time, and the culture and structure of the organization.

The challenges revealed in this study supports what has been identified in extant literature. Chesborough & Rosenbloom (2002), Mezger (2014), Baden-Fuller & Mangeatin (2013), Klang et al. (2014), Teece (2010), Sosna et al. (2010) and Adries & Debackere (2007) all identify with quite similar challenges revealed in this thesis.

RQ3: Organizational culture and structure, strong leadership, and collaboration are key mitigators of the impediments of business model transformation.

The findings from both extant literature and empirical data suggest that the following reduce to a significant degree the barriers of transforming a firm's model of business:

- An organizational design that imbibes a structure of flexibility and culture of change/innovation is a strong propagator of business model change
- Strong Leadership and Management know how mitigate the barriers of business model change to a high degree
- Strategic collaboration mitigates barriers and accelerates successful business model change

7.2 Discussion and conclusions

Available research studies on the topic of business model change is still very much in its infancy but is fast developing. Business model transformations is perceived as an issue that organizations are aware of but do not necessarily know how to initiate. The impediments to business model change in the organization studied were generally centered around two key elements: Attitudinal barriers and the complexity involved in the development and transitioning of business models.

This study shed some interesting insights on the phenomenon under study in multiple ways:

Firstly, the study highlights the proof that the value of experimentation in the pursuit of business model transformation cannot be over-emphasized. At the initial stage there were some doubts on the validity of the experimentation concept as it was in my opinion that it increased the time line of implementing a suitable business model and thus consumed more resources. However the study validates th(e contentions of academic studies (Yunus et al., 2010; Chesbrough, 2010; Sosna et al., 2010; Desyllasa & Sako, 2013; Doganova & Renault, 2009) who stress that the trial and error approach to business model transformation is critical to successful transition. Nonetheless, I still emphasize that the adoption of the trial and error approach should not be taken at face value. It is imperative that organizations establish an effective yet creative experimentation process: One that is initiated with idea creation, captures intricate phases and ends with critical study of the resulting outcomes, thus resulting in knowledge acquisition.

Secondly, ambidexterity barriers are a key challenge to the implementation of the new business model. Most respondents did stress the relevance of finding a way to separate the to-be model from the current one. As a matter of fact, the separation of both business models would allow for the creation of a favorable environment that would accelerate successful implementation of the new model. Perceived from a strategic view point, firms struggle to with the understanding of whether the new business model should be integrated into the core business or if it should stand alone. While this is not an easy choice because of the consequences it has on both change stakeholders and on processes, separation of both business models might lead to the mitigation of the conflict that ensues between the old and new models of business.

Lastly, the challenges of business model transformation are tightly interwoven to the specific contexts via which they occur. I stress this because every organization is unique. Hence in situations of significantly radical business model change, the structure, culture and employee reasoning of firms will strongly influence the specific barriers that will come into play. Yet, I equally acknowledge that in business model extensions and revisions, processes are more predictable and thus challenges can be generalized because they are foreseen to a certain extent. This is an area where further research is critically required given the likelihood that results gathered may generate concrete guidance for organizations.

7.3 Managerial contributions

The results of this study bring to light several implications for industry stakeholders. Firstly, it provides clarity to the area of the impediments that hinder the undertaking and successful implementation of business model transformation. The barriers identified within this study could be used as a yard stick in most organizations seeking to renew their business model.

Secondly, the mitigating factors to the barriers of business model change identified in this study provide insights for managers and stakeholders on what capabilities need to be in place to support the transition process. In light of the fact that many of the impediments identified are strongly tied to attitudes and complexity of the change process, managers can begin to develop frameworks that are founded on the identified mitigating factors to address potential challenges that may occur during the undertaking of business model change in their various organizations

7.4 Limitation and suggestions for future research

I acknowledge that this is a master’s thesis that has spanned a couple of months. As such and due to the nature of the study, the collection of empirical data has been limited to a single case study, with only 4 respondents. Equally, with the research being qualitative in nature, validity would have been increased if a research team had been in place to carry out analysis of data in a bid to ensure that there was no form of bias from the researcher. However, due to the nature of the study and given time frame and other resources, this was unachievable.

Furthermore, the study has focused quite significantly on the barrier of transforming organizations models of business, in contrast to researching in depth the factors that propagate business model change. However, as is evident in this study, the barriers themselves and the mitigators of the identified impediments can be perceived as being flip sides of the same coin. Thus, by analyzing and comparing the most critical mitigators and barriers, a conclusion that the findings in this thesis are truly significant to organizations. Yet, a multiple case study would have increased the degree of generalizability of the findings.

One key takeaway from this study is the issue of isolating the strategies of design, development and implementation of the new business model from the rest of the organization as a way to enable smooth transition without the threat of conflict from the current model and existing bureaucratic paradigms that exist in the organization. While there have been notable and contemporary instances of this approach (a notable one is Google X), the degree of success of this strategy remains largely unresearched. Only a few authors have proposed the design of autonomous, independent units aimed at focusing on business model transformations to establish what they termed “invoking the entrepreneurial spirit” required for successful business model change (Markides, 2013). As such there is need for future research to build on this concept as it could prove to be a revealing topic as firms continue to seek practicable approaches to drive successful design, development and implementation of new business models.

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APPENDIX 1 INTERVIEW PROTOCOL

Interview Protocol

The goal of this interview protocol is to establish a guide for the conducting of semi structured interview process for my thesis.

Guide

Ensure interview question converge with the research questions:

Core research questions:

- What challenges do firms encounter when undertaking business model change?
- How can the challenges identified in the above research question be mitigated?

Baseline of research questions:

- What is a Business Model?
- How do firms adopt or transition to a platform business model?
- What are the challenges of transitioning to a platform business model?
- How can the challenges of transitioning to a platform business model be addressed?

Questions:

Research Question probe	Possible Interview Questions
1. Establishes the respondent's understanding of the business model concept	1a. Could you please explain the current business model of your firm?
	1b. What would you consider to be the most significant components of the business model you just spoke about?
2. Establishes an understanding of the change process	2a. I recently read on the web/publication that this current model was implemented a few years ago. Can we discuss the old model why it was changed?
	2b. What steps were taken to get from the old business model to the current one.
3. Aims to Identify challenges	3a. What role did you particularly play in this change process?
	3b. What obstacles were encountered prior to starting the change of the old business model.
	3c. What obstacles were encountered during the change process

	3d. Which obstacles would you mention as being the most critical
	3e. In the list I recently sent you, can you identify any other obstacles encountered but you have not mentioned?
4. Aims to identify solutions to challenges	4a. How did the firm get past all these obstacles mentioned/identified
	4b. In what ways would you say things have changed since the new business model was implemented.
Question mode allows for temporary deviation from key questions if further information is required from the respondent. However, I have tried to ensure that these outlined questions form the core of the interview structure.	