Gordon Institute of Business Science
University of Pretoria

The Influence of InsurTech on The Existing Insurance Business Model

Name: Terashni Pillay

Student number: 29169438

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Abstract

New technologies, like InsurTech (FinTech in the insurance industry) is predicted by scholars to undermine the future effectiveness of the existing insurance business model. Scholars agree the low rates of digital transformation in the insurance industry and the wave of technological advancement in the external environment, poses a dilemma for existing insurers. Existing Insurers have the option to adapt to, collaborate with, or be eliminated by InsurTech.

This research explores the influence of InsurTech on existing insurance business model. A qualitative, exploratory approach was undertaken where data was collected through ten semi-structured, face to face interviews. The interview data was analyzed using a thematic data analysis.

The study found that the challenges experienced by existing insurers are the drivers spurring the growth of InsurTech in the industry. That InsurTech has the potential to spur business model innovation for existing insurers, by innovating the components related to competitive advantage, customer centricity and operational efficiency. The gaps identified in existing insurance business models are related to the current target market, revenue model and customer value propositions. The capabilities that existing insurers need to build to close those gaps identified include human capital, leadership and corporate innovation.

This study contributes to the literature by identifying business model innovation as an influence InsurTech will have on existing insurance business models. A framework is presented that can be used to understand the influence of external, technologically driven market pressures on an existing insurance business models with low rates of technological adoption.

Key Words

Business Model, Business Model Innovation, Insurance, InsurTech, Technology

Declaration

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

Terashni Pillay

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CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM

1.1 Background to the Research Problem

The rate of change of technology in the last decade has been exponential and is continuing to accelerate at a rapid pace (Catlin & Lorenz, 2017; Lee & Shin, 2018). A fundamental shift has transpired for businesses concerning the nature and application of information technology in their business models, and the value it creates throughout their operations (Bussmann, 2017; Catlin & Lorenz, 2017; Gai, Qiu, & Sun, 2018). The evolution of technology so far has been characterised by convergence, innovation, effectiveness, speed and price-performance, disrupting markets and buyer preferences (Shim & Shin, 2018).

The wave of technological growth has attracted increased attention from businesses of every size and shape, driven by the demands of a competitive business environment, changing consumer needs and expectations (Pollari, 2016; Skan, Dickerson, & Gagliardi, 2016). The promise of technology and digitisation has already had far reaching implications for businesses across a variety of industries, most notably in the financial services industry (Gai et al.,, 2018; Schueffel, 2016).

The advancement of technology, in particular internet-based and mobile services, combined with its widespread, global adoption rates, has driven the financial services industry down disruptive and innovative paths, and has forever changed the nature of the game for incumbent financial institutions (Catlin & Lorenz, 2017; Kuo Chuen & Teo, 2015). Apăvăloaie (2014)and Lee & Shin (2018) explain that the growing penetration of the internet and modern technologies has given rise to new market entry opportunities for technology providers, increasing the competitive pressure on established firms in a particular industry.

The emergence of financial technology (FinTech), a relatively new phenomenon, has had a profound influence on incumbents in the financial services industry across all sectors, most notably in the banking and insurance sectors (Leong, Tan, Xiao, Tan, & Sun, 2017). FinTech refers to the innovative financial products and services provided to consumers through technology enabled channels (Kuo Chuen & Teo, 2015; Lee & Shin, 2018).

In the financial services industry, FinTech has already had a profound effect on the provision of information, economic opportunities, consumer behaviour and driving technology development (Dapp, 2014; Puschmann, 2017). More and more consumers are beginning to change their expectations as the use of electronic interaction and digital channels has grown, resulting in more of their transactions being carried out on line in a

more cost-effective and efficient manner (Bussmann, 2017). According to Gimpel, Rau, & Röglinger (2017) and Dapp (2014) FinTech has resulted in a more dramatic structural change in the financial services industry, signalling disruption in the business environment. FinTech technologies and innovations such as cryptocurrencies, blockchain, and advanced data analytics are making new business models in the banking and insurance industry possible with their inherently customer centric approach (Skan et al., 2016).

Global investment and venture capitalist interest is at a record high in FinTech, nearly doubling in 2015 to US$2.29Bn and growing into the first quarter of 2016 (Pollari, 2016). Giants in the technology industry such as Facebook, Apple, Amazon, Google, Alibaba and Tencent have come to realise the advantages of following this disruptive trajectory in the financial services sector, introducing internal FinTech start-ups in payment, non-payment, and insurance lines (Baden-Fuller & Haefliger, 2013; Kuo Chuen & Teo, 2015).

FinTech has surpassed levels of hype, many believe it will change and shape the future of the financial services industry across all sectors. Not only because it has the ability to meet consumer needs with new product offerings and meet their expectations in delivering it (Shim & Shin, 2018)but also because of its unique ability to increase participation of the “under or unserved” markets (Kuo Chuen & Teo, 2015).

The insurance industry is one of the largest and most relevant markets in the financial services industry (Pollari, 2016; Skan et al., 2016). The regulatory environment, product complexity, and large capital reserves have traditionally acted as barriers for new entrants into the insurance market (Bussmann, 2017). As a result, the traditional insurance business model adopted by most incumbents has proven to be quite resilient as new entrants or start-ups face large amount of risks without the backing of mounds of capital reserves (Catlin & Lorenz, 2017; OECD, 2017). Moreover, incumbent insurers have never faced competition from others outside the industry for customer ownership (Catlin & Lorenz, 2017). Most insurers signal their comfort in customer ownership own as they cede the management of their customers’ needs and expectations to intermediaries like brokerage services (Dapp, 2014)

Until recently, the insurance industry has mainly been concerned about inward focusing trends related to risk prevention, institutional investors, and being able to stay ahead on the data analysis capabilities of competitors (Catlin & Lorenz, 2017)The latter may explain why the insurance industry, when compared to other industries, lacks digital maturity (Lee & Shin, 2018; Skan et al., 2016). However, the environment is rapidly

changing as digitally oriented customers look towards technological solutions from their insurer throughout the value chain (Pollari, 2016; Soule, 2016)

As the business environment changes consumers have become increasingly receptive to new and innovative insurance offerings from technology firms that were not thought of as traditional insurance providers. Consumers are changing their expectations of insurers to tailored services and products that are relevant for beyond the risks of today such as self-driving cars, cyber-attack insurance and reputational damage (Pollari, 2016).

Moreover, customers are expecting insurance providers to deliver innovative services through leading edge technology solutions. Typically, incumbents are hampered by their outdated legacy business architecture and infrastructure, adversely affecting their ability to respond to changing consumer needs in a fast and agile manner (Catlin & Lorenz, 2017; Shim & Shin, 2018; Yan, Schulte, & Kuo Chen, 2018), as more tech savvy consumers enter the market. FinTech's in the insurance industry, also known as InsurTech (Insurance Technology), are rising to this challenge at a rapid pace (OECD, 2017)

InsurTech are leveraging their ability to collect and analyse data from converging technologies (such as personable wearables and the Internet of Things) in order to offer consumers more personalised insurance products (Pollari, 2016), specifically tailored and priced to their needs and expectations. InsurTech ability to price premiums more accurately according to granular data analytics, gathered through emerging technologies, provides tough pricing competition and operational cost savings through efficiencies for incumbents (Lee & Shin, 2018).

In China, Tencent's Zhong An, established in 2013, rapidly scaled to become the dominant online insurer having underwritten 3.5bn policies (Pollari, 2016). In the West, InsurTech start-ups such as Lemonade and Trov have risen to be full online insurers, garnering significant investor attention (Catlin & Lorenz, 2017; Skan et al., 2016). From 2015-2016, venture capitalists have invested US 4.3 B into InsurTech start-ups (Catlin & Lorenz, 2017). The latter indicated that InsurTech on a global scale are on a disruptive trajectory and represent an imminent market risk for incumbents in the insurance industry who chose not to respond (Catlin & Lorenz, 2017; Kuo Chuen & Teo, 2015).

If incumbent insurer business models remain unchanged in the face of digitisation and their ability to respond to the threat (or opportunity) that is InsurTech will diminish. The

objective of this exploratory study is to understand how existing insurers will change their business models, or components of their business models, to coordinate a response to the challenges that InsurTech poses in the current business environment.

1.2 The Research Problem

The financial services industry in South Africa is one of the leading economic sectors, contributing approximately 20% of GDP (StatsSA, 2017). The south African financial services industry is dominated by several incumbents in both the banking and insurance sector (MarketLine, 2017)In 2014 the insurance sector which is made up of the long-term and short-term market reported combined earnings of approximately $42Bn representing a compound annual growth rate of 8-12% from 2012- 2016 (MarketLine, 2017). Despite being a lucrative sector, the key challenge faced by insurance companies in South Africa is poor penetration rates, leaving most of the population “under-served” (Smit, Denoon-Stevens, & Esser, 2017).

Typically, FinTech in South Africa is largely aimed at inclusion efforts targeting the “under-served markets” (Letsebe, 2018; Timm, 2018). InsurTech is one of the fastest rising trends in Fintech in South Africa, having gained significant momentum over the last two years (Timm, 2018). InsurTech is taking the initiative to seize this opportunity with the creation of new business models in the insurance industry that leverage technological innovations to collect and analyse rich data for tailored, uncomplicated products, and accurately priced premiums with lower operational costs through more favourable channels. InsurTech such as FoSho, Pineapple, Yalu, Naked, Click2sure, Investsure, and Simply have emerged in South Africa, disrupting the traditional insurance model with AI (Artificial Intelligence) through internet and mobile technologies to deliver affordable insurance to clients much faster than traditional South African insurers (Letsebe, 2018; Timm, 2018).

South African InsurTech have the powerful ability to build economies of scale, posing a serious threat to existing insurers in the South African Market. Unlike existing insurers, InsurTech are not constrained by the burden of heavy government regulation and have the benefit of flexible, legacy free systems (Lee & Shin, 2018). South African InsurTech can capture the “under-served market” with innovative solutions that can be extended to attach existing insurance markets. Many believe existing insurers are at a tipping point of either being consumed by InsurTech or unlocking the benefits of InsurTech.

InsurTech is argued by many to lead to digital products and services, process, and business model innovations (Lee & Shin, 2018; OECD, 2017; Pollari, 2016). Scholars

agree the low rates of digital transformation in the insurance industry, and the wave of technological advancement in the external environment, pose a dilemma for existing insurers; adapt, or face the threat of InsurTech (Catlin & Lorenz, 2017; Puschmann, 2017; Yan et al., 2018). The intention of this paper was to gain insight and understanding as to how InsurTech is likely to influence existing insurance business models, and how existing insurers should go about co-ordinating a response to the challenge.

1.3 Research Questions

The following research questions were posed for this study:

1. What are the challenges faced by existing Insurers?
2. Does InsurTech have the potential to spur business model innovation for existing insurers?
3. What are the gaps between existing insurance business models and the business model needed to respond to InsurTech?
4. What capabilities do existing insurers need to close those gaps that have been identified?

1.4 Research Purpose

The research is motivated by the innovation that InsurTech may spur in existing insurance business models through its attempt to address the current challenges faced by existing insurance companies. The study aims to add value to the insurance industry by understanding the drivers that are contributing towards the growth of InsurTech and the nature of the threat (or opportunity) it presents to incumbent insurers.

The purpose of the study is to assist insurers in understanding which areas of their business model are most affected by InsurTech and highlight the business model and/or business model innovations that are needed to respond to InsurTech. Additionally, this research intends to provide insight into the capabilities that are needed to facilitate the business model that is needed to thrive in the fast paced, consumer savvy, technology driven business environment existing insurers currently operate within.

1.5 Contribution to Knowledge

The purpose of this research will also assist in contributing to the body of knowledge from an academic perspective, considering the gap in the current literature as to how business model innovation occurs with respect to technological innovation (Baden-Fuller & Haefliger, 2013; Teece, 2010; Zott, Amit, & Massa, 2015). In addition to the latter, the purpose of the study is to shed some light on the ability of technology to facilitate new business models or business model innovation for incumbents in the insurance industry,

seeing as the extant literature on FinTech is predominantly focused on FinTech in the banking industry (Lee & Shin, 2018; Skan et al., 2016)

1.6 Research Scope

The research scope focused on gathering perspectives, insights, and opinions from executive and senior individuals in the insurance industry to understand the influence of InsurTech on existing insurer business models. The insurance industry is defined as: incumbent insurers, brokerages and InsurTech. The study included local and multinational firms based in Johannesburg, South Africa. The study was undertaken at the organisational level with the identified research participants as the unit of observation. Ten semi-structured interviews were conducted in the sample group for this exploratory analysis.

1.7 Initial Assumptions of the Study

The initial assumptions of this study are:

- InsurTech is an important force that will shape the insurance industry structure as posited by scholars in the extant literature (Catlin & Lorenz, 2017; Lee & Shin, 2018; OECD, 2017; Press, 2018; Yan et al., 2018)
- The sample chosen for this study is representative of the population the research wishes to make inferences to.

1.8 Layout of Report

The research paper proceeds as follows: chapter two presents an overview of the literature as it relates Fintech in the financial services industry, business models and business model innovation; chapter three presents the research questions that form the basis of this study; chapter four outlines the research methodology and design used to collect and analyse the data in this study; chapter five presents the results found, while chapter six discusses those results; chapter seven concludes the research study with the main findings, practical recommendations, and suggestions for future research.

1.9 Chapter Summary

This chapter presented an introduction to the research paper. The importance of understanding the influence of InsurTech on existing insurance business models was made for the research that follows. The introduction suggested that can challenge existing insurers, as the industry has been slow to adopt technology. The chapter closes will the proposed significance of this study and assumptions.

2 CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter reviews the extant literature as it relates to FinTech in the financial services industry, business models and business model innovation. The chapter starts out with an introduction to digital age in the context of the financial services industry, explore FinTech and its applications in the insurance industry. This followed by an introduction to business models, debates around the concept, definition and constructs. It then explores business model innovation. The chapter closes with a discussion on the benefits and barriers to business model innovation.

2.2 The Digital Age and The Financial Services Industry

Digitisation has had a profound effect on the provision of information, economic opportunities, consumer behaviour and driving technology development (Baden-Fuller & Haefliger, 2013; Puschmann, 2017; Teece, 2010). The penetration of the internet has made knowledge and information available to the global population extending data driven technologies and modern analytical methods to most sectors, value chains and business models (Lee & Shin, 2018; Teece, 2010). Like Teece (2010), Apăvăloaie (2014)and Lee & Shin (2018) explain the growing penetration of the internet and modern technologies has given rise to new market entry opportunities for technology providers, increasing the competitive pressure on established firms.

Gimpel et al., (2017)note that digitisation has had the most significant structural impact on the financial services industry. Lee & Shin (2017) observe financial markets were notably affected by the internet revolution in the early 1990s, following its ability to lower transactional costs. Dapp (2014) adds that the internet dramatically changed the value chain of the financial services sector, by spear heading electronic financial activity related to banking, insurance and stock-trading.

Puschmann (2017) points out, given that financial products and services are based on information it is hardly surprising that the financial services industry is impacted by developments in IT. Considering the latter, one would expect that the financial services industry would drive technological innovation and developments, however it is quite the contrary, financial institutions are not known for being early adopters of state- of the-art technologies (Dapp, 2014). Catlin & Lorenz (2017) explain traditionally, the financial services industry, like the insurance industry, enjoyed high barriers to entry, deterring new entrants into the market by leveraging tough regulatory requirements and high capital reserve requirements. Therefore, the need to adopt new technology was absent as technologically advanced alternatives were not available (Puschmann, 2017). Gimpel

et al., (201) and Dapp (2014) warn that recent technology driven developments pose a threat to the financial services sector which faces radical digital transformation.

Bussmann (2017) points out the historical linkage of the financial services industry and information technologies with the two having faced waves of IT transformations before. Bussmann (2017) clarifies that there is reason to believe a more dramatic transformation is looming this time around. As many as 83% of financial services organisations are convinced that technological disruption poses a significant risk (Lee & Shin, 2018). These recent developments have led to automated processes, a fundamental re-organisation of the value chain, new business models and new actors entering the market in the financial services industry (Puschmann, 2017). Dapp (2014) like Bussmann (2017) points out that unlike the past, recent IT developments in the external environment are acting as catalysts for change in the financial services sector. Technology firms with little or no financial services background are developing innovative products and services targeted at the financial industry's value chain at scale not seen before, these firms are called "FinTech's".

2.3 What is FinTech? Evolution of Fintech

FinTech, an abbreviation for Financial Technology, is a blend of the words "Financial Services" and "Information Technology" (Gimpel et al., 2017). The term FinTech was first used in the 1990's in the name of a project commissioned by Citi Group (Lee & Shin, 2018). It reflects an IT induced transformation (Puschmann, 2017), an umbrella term that innovatively encompasses personalised financial solutions enabled by IT (Kuo Chuen & Teo, 2015; Gimpel, 2017; Dapp, 2014; Arner et al., 2015; Bussmann, 2017). Gimpel et al., (2017) notes confusion among academics in their definition and scope of FinTech, where some link the term to start-ups and others modern technologies. Puschmann (2017) observed that most publications on FinTech are from common sources, such as magazines and newspapers with only a few scientific publications hence the confusion. In general, Gimpel et al., (2017) found most researchers agreed that FinTech leverages digital technologies (Dapp, 2014; Kuo Chuen & Teo, 2015; Puschmann,2017; Bussmann, 2017; Chuang, Liu, & Kao, 2016) and offered the definition below.

Gimpel et al., (2017), characterises FinTech as the *"usage of digital technologies such as the internet, mobile computing and data analytics to enable, innovate and disrupt the financial services"* (p.247). The authors also define FinTech Start-ups as "newly *established businesses that offer financial services based on FinTech"* (Gimpel et al., 2017, p. 247). Lee & Shin (2018) single out FinTech as the emerging impetus for a new paradigm shift, one of the most important innovations in the financial industry.

Growth and investment into Fintech has followed a rapidly increasing trend since 2010 as shown in *Fig. 2* (Dapp, 2014, Bussmann, 2017). By 2020, FinTech start-ups are estimated to manage more than 20% of financial services business. Consequently, Lee & Shin (2018) put forward that FinTech will be a major player across all elements of the financial services landscapes. FinTech, revered as a game changer by many, promises to change consumer facing elements of the financial services value chain (Gimpel et al., 2017; Puschmann, 2017; Bussmann, 2017, Lee & Shin, 2018, Dapp, 2014). Gai et al., (2018)) note the following technologies: artificial intelligence, social media, smart phones, blockchain, mobile networks and technologies, big data, image) processing, trust management, mobile embedded systems, cloud computing and aggregated data analysis, as powering the dramatic rise of FinTech.

The OECD (2017) cautions calling FinTech a disruptive force pointing out that disruption is a hindsight observation. Yan et al., (2018), disagree using Chinas recent digital revolution through emerging technologies in the financial space as a counter case in point. The WEF (2016) also describes these technologies as enabling the next wave of financial services innovation, pointing out its converging nature. The intangible nature of financial services is well suited to new innovative technologies like FinTech (OECD,2017).

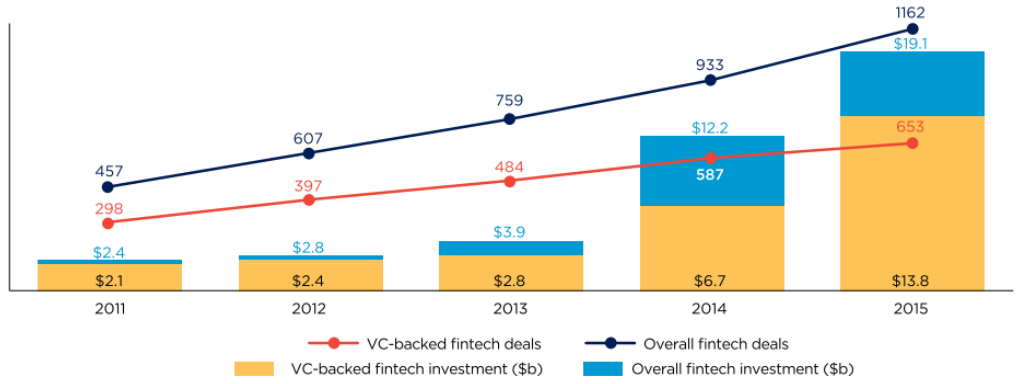

Figure 1:Global trend in FinTech investments. Source: Pollari (2016)

2.4 FinTech Drivers and Ecosystem

The rise of Fintech has been attributed to the inward focus of financial institutions after the 2008 financial crisis. Financial institutions have been preoccupied on regulatory, regrouping and balance sheet re-structuring since 2008 (Catlin & Lorenz, 2017). Apart from the explosive growth of internet enabled technologies since 2008, changes in consumer consumption, demand behaviour and expectations have been the primary drivers FinTech (Bussmann, 2017). Consumers are beginning to change their expectations as the use of electronic interaction and digital channels has grown, resulting

in more of their transactions being carried out on line, in a more cost-effective and efficient manner (Puschmann, 2017).

Moreover, early FinTech adopters, tech-savvy millennials (aged 18-34) were found to consume a significant portion of FinTech products (Lee & Shin, 2018; Dapp, 2014). This is an important observation notes Lee & Shin (2018), considering that tech-savvy millennials, will account for the largest portion of the population over the next few decades. Dapp (2014) notes consumers expect more personalised products and higher quality services from their financial institutions than before.

FinTech start-ups have risen to this challenge and are successfully leveraging modern data analysis methods to anticipate what their customer desires are in constructing individualised, digital solutions (Bussmann, 2017; Puschmann, 2017; Dapp, 2014, Lee & Shin, 2018). Puschmann (2017) refers to the latter as customer-orientated digitisation. Lee & Shin (2018) find that most consumers are beginning to seek financial solutions from more than one institution to fulfil their needs. Interestingly, Bussmann (2017) notes that financial solutions are being developed by external players not part of the traditional financial services industry such as technology companies and social media firms. The regulatory environment has also contributed to the emergence of Fintech as many countries such as London and Singapore have created initiatives to lower regulatory hurdles to entry in recent years (Lee & Shin, 2018, Skan et al., 2015).

Lastly, traditional business model of financial institutions has also contributed as a driving force of FinTech (Dapp, 2014, Lee & Shin, 2018, Shim & Shin, 2018). Bussmann (2017) remarks that while FinTech's bring competition to the financial services landscape they also bring with them the opportunity to help traditional institutions deal with cost, regulatory and market pressures in the post-crisis landscape. Figure. 3 below summarises the FinTech ecosystem put forward by Lee & Shin (2018).

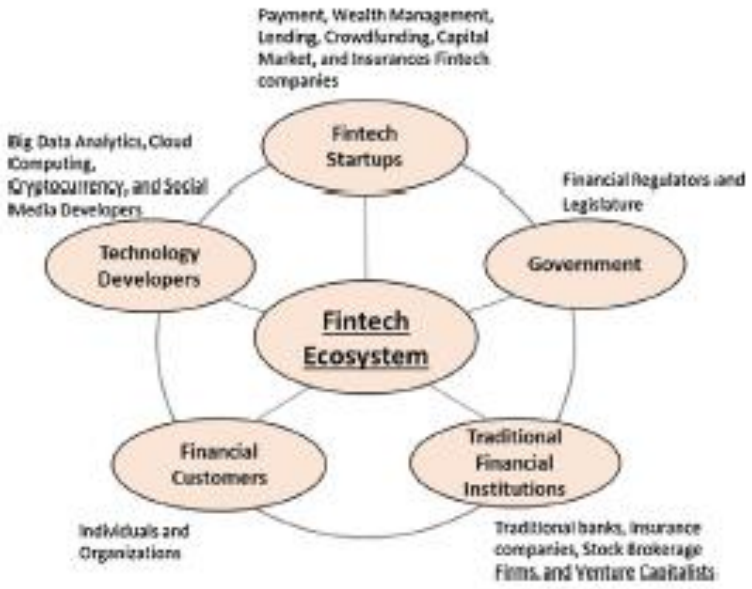

Figure 2:FinTech Ecosystem (Lee & Shin, 2018)

However, Gai et al., (2018) warns that while the environment may support the inclusion of FinTech's, issues such as security and privacy may pose great challenges for its continued rise. The World Economic Forum (WEF) agrees adding the implementation around new technologies such as the blockchain, will result in delays and added complexities unless there is deep collaboration between innovators, incumbents and regulators (WEF, 2016).

2.5 FinTech Areas of Disruption in the Financial Industry

The WEF (2016) conducted a major survey into the future of the financial services industry, considering FinTech disruption. The survey outlined the following sectors of the financial industry prone to FinTech disruption: payments, investment and wealth management, market provisioning, lending and insurance.

The impact of FinTech in the payment space has been profound (Lee &Shin, 2018), multi-channel payments are making it easier for consumers to make purchases compared to more traditional channels (Caitlin& Lorenz, 2018). FinTech's in the payment sphere have made significant changes to the financial industry structure pushing the boundaries towards a cashless environment (Bussmann,2017; Lee & Shin, 2018, Arner et al., 2015, Kuo Chuen & Teo, 2015). In this space, FinTech's have made the process simpler, faster and transparent, and at the same time fostered opportunities to collect granular customer data (Pollari, 2016). The WEF (2016) posits through this high degree of customer centricity, payment FinTech's have enabled a new business model. Lee &

Shin (2018) agree with the latter, pointing out that the FinTech payment business model is innovating at a rapid pace.

In the wealth and investment management space, FinTech has reduced the price of financial advice by employing robo-advisors (Puschmann, 2017). Bussmann (2017) and Lee & Shin (2018) observe that the success of this business model depends on consumer behaviour, that is accepting of automated and passive investment management. Gai et al., (2018) argue that when it comes to long term financial services, consumer behaviour may not favour this business model, since customer switching costs are high and tend to favour brand equity in this financial space (Caitlin & Lorenz, 2017).

A study done by Chaung et al., (2016) proposes an alternative view to the success rate of FinTech adoption, their study shows that brand, company reputation and trust are essential for consumers to have a positive attitude towards their offering. Caitlin & Lorenz (2017) agree, arguing that established incumbents have the edge of FinTech's in this regard and make note of switching costs that are a challenge for FinTech. However, market reports show that customer loyalty is generally low unless a long-term policy has been purchased (MarketLine, 2016). FinTech disruption also be extended to the capital and lending markets with innovating business models such as peer to peer lending and crowd-funding (WEF,2016; Lee & Shin, 2018), as well as the insurance sector.

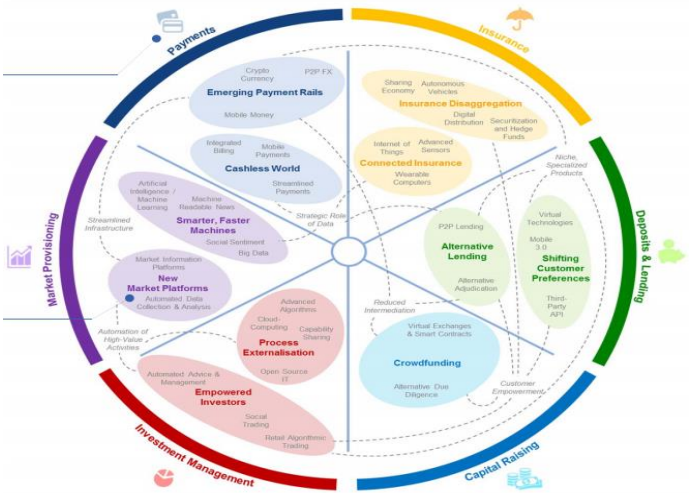

Figure 3:FinTech Areas of Disruption (WEF, 2016)

2.6 The Potential for FinTech in the Insurance Sector

FinTech in the insurance sector has been termed "InsurTech". The definition of FinTech and InsurTech is indistinguishable, both describe the application of the same

technologies with the potential to spur innovation in the financial services industry (Lee & Shin, 2008; OECD, 2017; WEF,2016; Dapp, 2014; Yan, Schulte & Kuo Chuen, 2018; Bussmann, 2017). Yan et al., (2018) warns that the impact of disruptive FinTech technologies such as the block chain, big data and modern data analysis methods on the insurance sector is going to be more profound than it has been in another sector of the financial services industry. Yan et al., (2018) goes on to point out that the pace at which the business environment will change for incumbent insurers due to impact of InsurTech will be more significant than most anticipate (Dapp,2014, Puschmann, 2017; OECD, 2017).

Yan et al., (2018) explains the insurance industry has been slow to adopt digital technologies because traditionally high barriers to entry such as product complexity, capital reserves, solvency and onerous regulatory requirements, have kept new entrants from providing competition in the sector. As a result, many incumbent insurers have had little to no reason to innovate their business models by adopting new technologies, lagging other sectors in digital maturity, operating with a 300-year-old business model (Catlin & Lorenz, 2016, Yan et al., 2018; Puschmann, 2017). Catlin &Lorenz (2016) mention that although the insurance business has been resilient for a long time, the digital effect will be felt, as the environment is increasingly becoming more supportive for InsurTech (Bussmann, 20,17, Dapp, 2016, Lee & Shin, 2018; Puschmann, 2017). Sood & Tellis (2011) postulate this maybe a result of technological evolution, enabling the growth of new market segments within a market offering improved products and services.

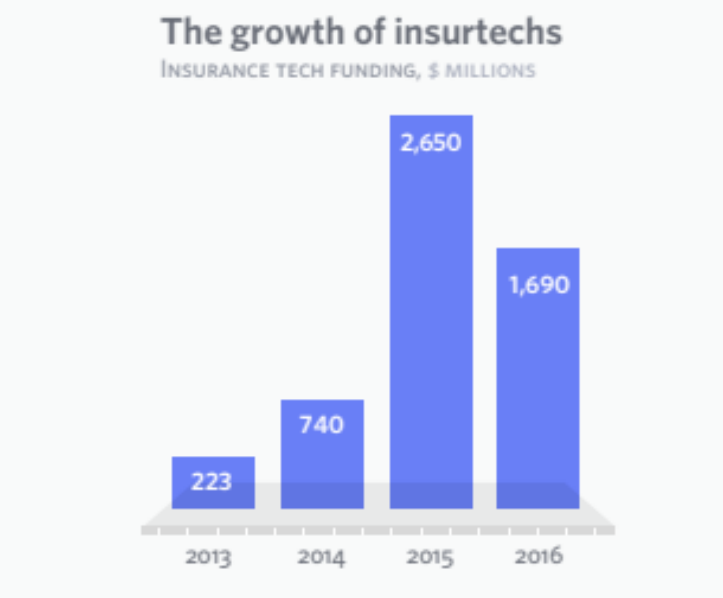

Figure 4: Growth of InsurTech (Catlin & Lorenz, 2017)

Figure 4 shows the growth of InsurTech. Investment into InsurTech activity has surged indicating the higher barriers to entry into the insurance industry is no longer regarded as impregnable (Catlin & Lorenz, 2017). The global investment into InsurTech, $US4.3B in total from 2013-2016, is targeted at every part of the insurance value chain, threating to erode the traditional competitive advantages and dominance of insurers in the industry (Catlin & Lorenz, 2017).

2.7 Insurance Industry Overview

The Insurance Industry is made up the life insurance sector (long-term) and non-life sector (short-term) insurance market (Slavova, n.d.). The long-term insurance sector includes products such as life, health, disability and mortality. The short-term insurance sector consists of motor, commercial, property and casualty. Key indicators for the insurance market are the claims ratio and the underwriting margin. Globally the total market value is $4.61B growing at 4.3% (MarketLine, 2018). The market value forecast for the global insurance market is $5.5B in 2021 (MarketLine, 2018).

Catlin & Lorenz (2017) point out, insurers are threatened by trends that i) cause shifts towards risk prevention rather than insurance against it as well as by ii) companies that own and analyse data. Pollari (2016) warns InsurTech threaten incumbents in both regards as they can collect an increasing amount of data at a granular level that allows more insightful analytics, product pricing, claims management and risk prevention (Puschmann, 2017).

In general, InsurTech, has the potential to facilitate new methods of service provision and granular data collection, leading to better risk identification, pricing, claims processes and mitigation measures (OECD,2016). Lee & Shin (2018) note that InsurTech service business models provides a direct link between the insurer and the customer. FinTech's specialising in data analytic and aggregation tools and methods means that they can match and pool together customers based on their risk profiles, offer customers personalised products that meet their needs and streamline various processes in the insurance value chain.

Slavova (n.d.) supports this view adding that InsurTech are changing the core of the insurance business model with innovations through monitoring client behaviour and advice led customer interactions that lead towards loss prevention (Puschmann, 2018). Whilst Catlin & Lorenz (2017) agree with Slavova (n.d.), they point out that InsurTech may be able to leverage data analytics to launch new business models, however they question whether InsurTech truly have the competitive advantage, considering that incumbent insurers are known for their resilient business models with a record of creating

value for centuries. Sood &Tellis (2011) point out that incumbents who misinterpret the potential impact of new technologies are likely to cause their demise, noting the impact that Fintech has already had in revolutionising the banking industry, completely obsoleting old business processes in some cases.

An alternative view from a business model perspective, brings into question as to whether insurers are going to be able to continue generating potential future streams of income given that the innovation brought by InsurTech are likely to enjoy strong natural protection against imitation (Teece, 2010; Sosna et al.,2016; Lee & Shin, 2017). In addition, Sood &Tellis (2011) postulate that incumbents are likely to fail if they miss the opportunity to switch over to new technologies. Although insurers may have the advantage of historical trends and data, Caitlin & Lorenz (2017) and Yan et al., (2017). question whether incumbent insurers will be able to keep up without changing their traditional business models.

2.8 Business Models: An Introduction

The essence of a business model describes the way an enterprise creates, delivers, captures and translates customer value into a profit (Teece, 2010). At the core of any established enterprise, is a business model that has either been explicitly or implicitly defined, to describe an enterprises approach to value creation (Teece, 2010). Business models have garnered a substantial amount of attention by both academics and management practioners alike, as a concept that is linked to technology, innovation and strategy (Sosna, Trevinyo-Rodríguez, & Velamuri, 2010; Zott et al., 2015).

The business model concept was an avid point of interest on the academic research agenda for some time, reflected by the exponential increase of publications on the subject matter since 2010 (Baden-Fuller & Haefliger, 2013; Spieth et al., 2014). Palo & Tahinten (2011) curious in the surge of business model literature found that interest in the business model concept was spurred primarily by the “internet boom”. Apăvăloaie (2014) and Teece (2010) note that the growth of the internet and information technologies has given customers access to vast amounts data not previously available to them.

Because of increased access to information, consumer choices are changing, their varied needs are finding expression in the market place, and the supply of alternatives has been made more transparent (Teece, 2010). The internet, Apăvăloaie (2014) argues is no longer a mere extension of modern business, instead it represents a revolutionary driving force of change. The growth of the internet has served to raise new and

fundamental questions about how businesses create and deliver value to their customers (Teece, 2010).

Chesbrough (2010 agrees, noting that business models can provide the means to facilitate the commercialization of new ideas and technologies. Amit & Zott (2012) add the business model defines how organizations shape value creation, performance and competitive advantage in the changing business environment spurred by the internet.

2.9 Defining the Business Model Concept

Spieth, Schneckenberg & Ricart (2014) point out that despite the high-level attention that has been paid to the business model concept over the years, there are still many inconsistencies in the literature surrounding the conceptual framework of the business model itself. There has been a long-standing debate in the literature surrounding the theoretical grounding of the business model concept (Teece, 2010; Spieth et al., 2014; Baden-Fuller & Haefliger, 2013; Chesbrough, 2010). Baden-Fuller &Haefliger (2013) argue there is no clear distinction between the business model concept and the strategy lexicon, while others view the concept as one that is potentially separable from strategy (Hossain, 2016; Teece, 2010). It is important to understand the theoretical underpinnings of the business model concept to fruitfully investigate the constructs individually and in relation to each other (Zott et al., 2015).

Mason and Spring (2010) argue that researchers have predominantly treated business models as descriptions of how business is done instead of a valuable model that can capture the essence of the organizational strategy, arranged in a coherent manner. Teece (2010) agrees with Mason & Spring (2010) clarifying that business models are not financial models but conceptual model of business. The academic consensus, although fuzzy is converging, resolving that the business model framework is an interdisciplinary concept that may reside somewhere between business strategy and social sciences (Spieth et al., 2014; Baden-Fuller & Haefliger 2013; Amit & Zott, 2012, Teece, 2010). Scholars agree, business models and strategy are linked but are distinct from each other (Baden-Fuller & Haefliger, 2013).

In addition to debate around the theoretical underpinnings of the business model concept, the definition of a business model has been somewhat diverse among academics. Ostwalder, Pigneur &Tucci (2005) found large diversity in the understanding of the business model concept, showing there is no generally accepted definition (Morris, Schindehutte, & Allen, 2005). Amit & Zott (2012) define a business model as an interconnected ecosystem, performing interdependent activities that seeds the way in which an organization does business with its customers, partners and vendors. While

Teece (2010) describes the business model as a reflection of the logic that an organization employs in proposing customer value, viable profit generation and value capture. Gambardella & McGahan (2010) posit that a business model is an organisations approach to generating revenue at a reasonable cost, based on assumptions about how it will create and capture value. The definitions presented above share value creation as common factor.

Zott et al., (2011) argue because there is no generally accepted definition of the term “Business model” there are substantial challenges in determining what constitutes a good business model. However, from the definitions above the researcher notes a considerable overlap in most definitions and only slight differences, indicating convergence to a shared definition (Wirtz, Gottel, & Daiser, 2016). Similarly, Morris et al., (2005) finds the multiple perspectives held by academics are notable for both their similarities and differences. Baden-Fuller & Haefliger (2013) complain that the debate around the theoretical underpinnings and the definition of the business model re-directs inquiry away from other key questions. Never the less, the business model concept is important to understand and leverage, if companies want to remain successful in the face of digitalised markets, adjust to varying market conditions and dynamic competition in an increasingly globalized business context (Wirtz et al., 2016).

In general, scholars agree that a business model serves as an outline of the business logic of how an organization will play in their market spaces and earn a profit (Amit & Zott, 2012; Teece, 2010; Baden-Fuller & Haefliger, 2013; Osterwalder et al.,2005). A business model simply “reflects management’s hypothesis of what customers want, how they want it and what they will pay, and how an enterprise can organize to best meet customer needs and get paid well for doing so” (Teece, 2010, p.191).

Morris et al., (2010) insists the following questions need to be answered when describing the outline of a business model: 1) how will the firm create value? 2) For whom will the firm create value? 3)What is the organizations internal source of advantage? 4) How will the firm position itself in the market place 5) How will the firm make money? 6) What is the time, scope and size of ambitions?

The Figure 1 shows the elements of a business model design according to Teece (2010). The model shows how value is created for customers using feedback loop and shares the views held by Morris et al., (2010). First, the firm should create value for customers through product and service innovations using nominated technologies and features, next the firm should determine the value the product and service innovation will create for customers, then identify how to deliver and capture the value from the target market

for the firm, in the form of profits. Teece (2010) adds that business models make implicit assumptions about customers, the changing nature of customer and engagement needs, the projected behavior of revenue and costs and anticipated competitor responses. Amit & Zott (2012) agree with Teece (2010) adding that it is an activity system that not only satisfies the needs of the market but also specifies which parties are responsible for each activity and how those activities are coordinated.

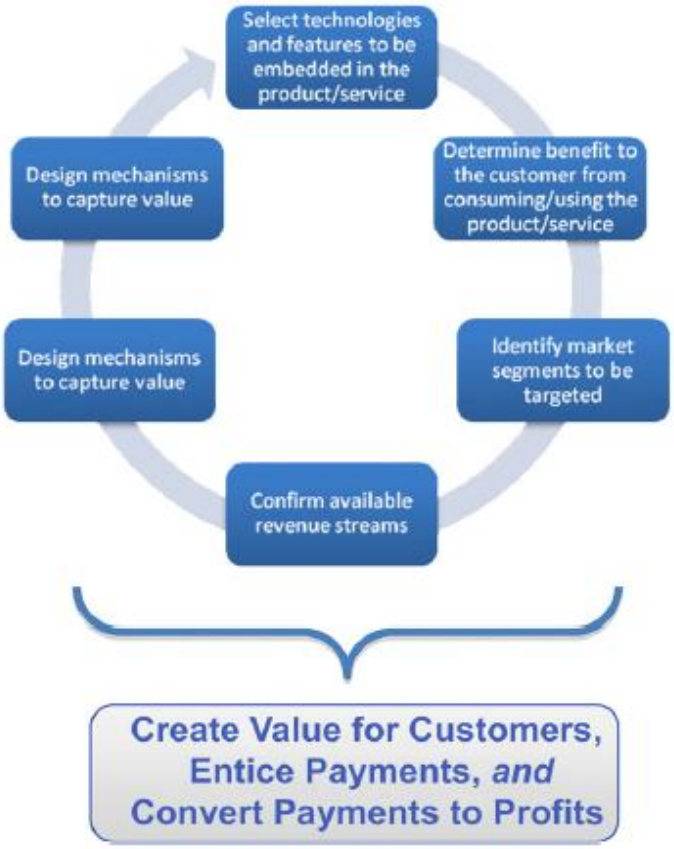

Figure 5:The Elements of a Business Model Design (Teece, 2010)

For this study, Teece's (2010) definition will be used where a business model is understood to articulate the logic that an organization uses to create and deliver value to their customers, as well as outline the revenue, cost and profit structure (revenue model) associated with delivering that value.

2.10 The Core Elements of a Business Model

Because of the diverse views held on the definition of what a business model is, there is also a lack of consensus on what the defining components of a business model are (Morris et al., 2005; Amit & Zott, 2012; Palo & Tahtinen, 2011; Osterwalder et al., 2005). Some views are more focused on organizational and customer components while other views tend to focus the robustness of the revenue potential for the business idea

(Mahadevan, 2002). Morris et al., (2005) study illustrates the diversity in academic views on the key components that constitute a business model. In their study the number of components considered as key elements, ranged from four to as many as 24. Similarly, Table 1 below summarizes the key components found in the extant literature that are thought to be the blue print of what constitutes a good business model.

Table 1: A literature review of the key components of a business model

Osterwalder et al., (2005)	• Value Proposition • Target customer • Distribution Channel • Relationship • Value configuration • Core competency • Partner network • Cost Structure • Revenue model
Chesbrough (2010)	• Value Proposition • Market segments • Value Chain Structure • Revenue Mechanism • Partner and Value Network • Competitive Strategy
Mason &Spring (2010)	• Technology • Network Architecture • Market Offering
Teece (2010)	• Technology • Customer benefit/value • Target Markets • Revenue Model • Value Capture and Delivery
Morris et al., (2005)	• Value offering • Economic model • Customer interface and relationship • Partner network • Internal infrastructure/

	• Target markets
Baden-Fuller & Haefliger (2013)	• Customer Identification • Customer engagement • Value Delivery • Monetization

Following the analysis of the literature presented in Table 1 above, this paper will define a good business model design to employ the following business model components:

- Customer value proposition
- Revenue Model
- Target Market
- Competitive Strategy
- Technology
- Value creation and Delivery
- Resources and Capabilities

2.11 The Need for Business Model Innovation

The business environment is rapidly changing following advances in technology with the introduction of Artificial Intelligence (AI), block-chain, Internet of Things (IOT) and data analytics (Palo &Tahtinen, 2011; Skan et al.,2016). As a result, firms are facing increasing internal and external market pressures to capture the value of these new technologies and translate them into profit (Waldner, Poetz, Grimpe & Eurich, 2015; Chesbrough, 2010), especially in the financial services industry (Puschmann, 2017). New communications and information technologies means that customers have more choices through technology enabled product development, changing consumer needs and alternatives to meet those needs (Teece, 2010). Baden-Fuller & Haefliger (2013) point out that business model elements may have to change for technology to create value for customers. Palo &Tahtinen (2011) observe that if organisations are to leverage these technologies, they need to build the ability to innovate their business models. Teece (2010) insists that value creation from technological innovation needs to be coupled with business model innovation.

This follows the argument made by Chesbrough (2010) who observed that technology by itself has no single objective value and will remain latent, until such time, that a business model is somehow able to liberate the commercial, and economic value embedded within it. Baden-Fuller & Haefliger (2013) note that selecting the right

technology is a business model decision since business models mediate the link technology and organisational performance.

For organisations to continue to create, capture, deliver and translate value from technology for their consumers, their business models must change over time, adapting to the changes in the market (Teece, 2010). Mahadevan (2002) identifies innovation as a lever for potential value creation. Sosna et al., (2015) notes business model innovation is a sustainable form of innovation, for an organisation whose future effectiveness is likely to be undermined by changes in the external environment.

2.12 A Framework for Business Model Innovation

Business Model Innovation (BMI) is an extension of the business model framework (Hossain, 2016). Business model innovation occurs when the organisation can rearrange and commercialize underlying assets in a novel way (Gambardella & McGahan, 2010). As an emergent phenomenon, BMI has the potential to be a valuable lever for all organizations as it can exploit new opportunities in existing markets or create new ones (Hossain, 2016; Amit & Zott, 2012). BMI is defined as employing new business logic in an existing business through a fundamentally different business model by finding new ways to create and capture value (Spieth et al., 2014; Hossain, 2016). BMI differs from other types of innovation as it is not limited to the organizations products and processes but extends to throughout the organisation activity system (Waldner et al.,2015).

The Figure 6 below provides an overview of BMI according to Mahadevan (2002).

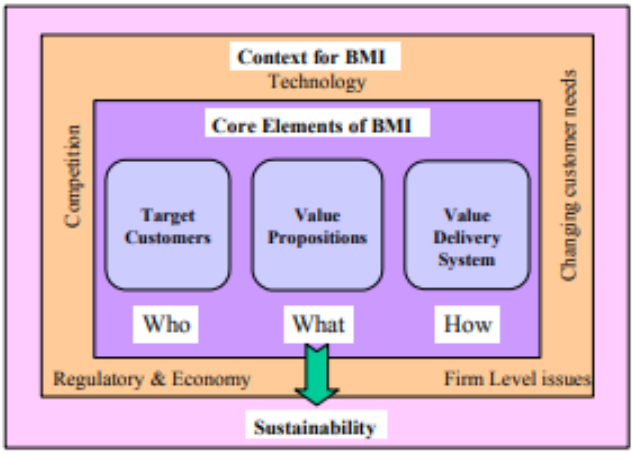

Figure 6:Business Model Innovation Framework (Mahadevan ,2002)

The model shows a framework that explains the process of BMI according to Mahadevan (2002). In this conceptualization, the context of the business environment creates a case

for business model change. External pressures in the business environment related to competition, technology, changing consumer needs, regulatory and economy, and firm level issues initiate the cycle of business model innovation. Mahadevan (2002) explains the changing context results in value shrinkage that causes the organisation to re-configure key business model components related to the “Who”, “What” and “How” in various combinations, until such time an alternative is found, doing so results in sustainability (Mahadevan, 2002; Waldner et al.,2015). Sosna et al., (2016) acknowledges the uncertainty related to business model innovation in rapidly changing market conditions and suggest a “trial and error” learning approach to the conceptualization of new business models and implementation is more appropriate for an established firm.

2.13 The Advantage of Business Model Innovation

Business Model innovation has several advantages and can be a source of future value for new and established organisations. It is a tool that organisations have at hand and is often underutilised (Chesbrough, 2010). Business model innovation can be an important source of competitive advantage as competitors are likely to find imitation more difficult (Mahadevan, 2002; Baden-Fuller & Haefliger, 2013). Amit & Zott (2015) comment that it is easier to erode the returns of a product innovation in comparison to an innovation at the business model level, as a result business model innovation is likely to provide a more sustainable competitive advantage. However, Teece (2010) cautions that innovating a business model, no matter how novel, is not enough to sustain a competitive advantage, it must be combined with a competitive strategy analysis to protect it from imitation by competitors. Business model innovation can exploit new target markets and lead to the creation of new industries, for example FinTech in the payment card industry (Teece, 2010).

2.14 Barriers to Business Model Innovation

Chesbrough (2010) recognises that while organisations may be invested in exploring new ideas and technologies they seldom have the ability to innovate their business models through which these ideas can pass. The ability to innovate a business model matters since the same piece of technology taken to market through two business models can realise completely different economic outcomes (Teece, 2010; Chesbrough, 2010; Baden-Fuller &Haefliger, 2013). It is important for organisations to build the capability of business model innovation for future effectiveness (Sosna et al., 2016).

Amit &Zott (2012) emphasise it is not enough to focus on product innovation for to differentiate from competitors insisting business model innovation is where the greatest

benefits lie. Teece (2010) acknowledges that innovating a business model requires the organisation to change the paradigm to which they go to market, and for this reason expects considerable amounts of organisation inertia. However, as seen with FinTech in the banking industry, it is preferable that a firm initiates the change internally rather external events forcing the change (Teece, 2010). Therefore, the barriers of leadership to organisational change, organisation inertia to "trial and error" experimentation and conflicts with maintaining the status quo need to be overcome to embrace the change caused by digitisation in the external environment (Chesbrough, 2010; Baden-Fuller & Haefliger, 2012; Sosna et al., 2016; Amit & Zott, 2012).

2.15 Conclusion

This chapter has presented a review of the literature on business models, business model innovation and FinTech. It explored how technological advancement in the external business environment has led to business model changes in the financial services industry. The chapter explores FinTech and how it has spurred business model innovation. A review of the business model and business model innovation literature was presented, exploring debates, similarities and contradictions. The chapter looks into InsurTech in the insurance industry and its potential for business model innovation. This leads to chapter three which presents the research questions of this study.

3 CHAPTER THREE: RESEARCH QUESTIONS

3.1 Introduction

This chapter presents the research questions that formed the basis of this study. The research questions were drawn from a review of the extant literature presented in chapter two. These questions were generated to gain more insights into the influence of InsurTech on the existing insurance business model, as the financial industry faces the reality of digitization.

3.1.1 Research Question One

What are the drivers contributing to the growth of InsurTech?

In a single generation, insurers have found themselves operating in a burgeoning digital age with the onset of new channels of distribution (web, mobile and social media), digital product development and service innovations, new methods of data analytics, claims management, and risk pricing. The aim of this question is to uncover what these challenges are, as well as how new technologies are contributing towards these challenges.

3.1.2 Research Question Two

Does InsurTech have the potential to spur business model innovation?

The aim of research question two is to uncover how InsurTech might be addressing the challenges currently faced by incumbent insurers, and to what extent InsurTech will influence a structural change in the way insurance is conducted. The question also attempts to uncover whether InsurTech will influence incumbent insurers to change elements of their business models to respond to the threat (or opportunity) of digitization in the financial services industry, through business model innovation.

3.1.3 Research Question Three

What are the gaps between the current business model of existing insurers and the business model that is needed to thrive, considering the onset of InsurTech in the industry?

The aim of research question three is to identify the gaps between the existing business model of insurers, and the business model that individuals in the insurance industry perceive is needed to respond to influence of InsurTech in the industry. The purpose of the question is to understand if business model innovation is needed to address InsurTech, and if it is, what are the components of the existing business model that will be predominantly influenced.

3.1.4 Research Question Four

What capabilities do existing insurers need to close the gaps that have been identified?

The aim of research question for is to understand what capabilities, resources, skills, and knowledge are needed to close the gaps that have been identified by individuals in the industry. The purpose of the question is to understand how existing insurers are thinking about structurally adapting to new pressures brought on by InsurTech, as well as how decisions in utilizing new technologies and competing in a digital age will shape the needs of their future capabilities.

3.2 Conclusion

This chapter has presented the research questions that forms the foundation of this study. In answering these questions, the research is expected to garner a better understanding of the influence of InsurTech on the existing insurance business model. The following chapter presents the methodology that was used to conduct this qualitative study.

4 CHAPTER 4: RESEARCH METHODOLOGY AND DESIGN

4.1 Introduction

This chapter outlines the research design used in this study to answer the research questions posed in chapter three. The study used a qualitative approach to understand the influence of InsurTech on the existing insurance business model. Qualitative data was collected using semi-structured interviews conducted with senior managers and executives in the insurance industry. The interview data collected was analysed, coded and categorised into themes based on the literature review outlined in chapter two. Data reliability, validity, ethical considerations, and limitations of the study are presented at the end of this chapter.

4.2 Choice of Methodology

This research was framed as a broad investigative study on the influence of new technologies in the insurance industry sector. As a qualitative study examining the contemporary phenomenon of InsurTech on existing insurer business models (Leong, Tan, Xiao, Tan & Sun, 2017), it requires an in-depth understanding of the interplay between new technologies (named “InsurTech” in the insurance space), business models, business model innovations, and incumbent insurers. An interpretivist philosophy was adopted to understand the thoughts, perspectives, and opinions of individuals in the insurance industry towards InsurTech and its ability to spur business model innovation for incumbent insurers (Saunders & Lewis, 2012). This philosophy is considered suitable as this qualitative inquiry seeks to understand how this phenomenon was established; the changes it may bring about that lead to other changes and how it will unfold over time (Elliot &Timulak, 2005).

In alignment with the research philosophy of this study, a qualitative approach allowed for an inductive angle as it sought to understand the nature of InsurTech as a potential disruptor on incumbent insurer business models (Crouch & Mckenzie, 2006; Douglas, 2003). Qualitative research has become increasingly recognised and valued as a paradigm of inquiry (Nowell, Norris, White & Moules,2017). This method of research is recommended when the researcher aims to interpret a phenomenon as shaped by the relevant business context rather than establishing a relationship between two variables (Douglas, 2003). The literature agrees that qualitative research is intended to generate insights grounded in human experience (Nowell et al., 2017, Sanders & Lewis, 2012) and, for this reason, is considered appropriate for this study. The study also aimed to garner insights into business model innovation in response to new technologies

(Douglas, 2003) from comparisons of responses, incidents and patterns observed in the data (Douglas, 2003). In this respect, the choice of methodology is relevant considering the current, fast paced disruptive context (Saunders &Lewis, 2012) the financial services industry is experiencing, particularly in the insurance sector (Pollari, 2016).

The nature of this research was exploratory and was useful in gaining a deeper understanding the topic that was unfamiliar to the researcher. Elliot & Timulak (2005) adds that exploratory research helps in building rich descriptions of new constructs in the literature. The contemporary phenomenon of InsurTech disruption on incumbent insurers is still in its early stages for the insurance industry (Kuo Chuen &Teo, 2015). This type of research was considered appropriate as the body of knowledge in this field is relatively new, hence insights generated from this study would require confirmatory research in the future (Saunders &Lewis, 2012).

The research was conducted over an 8-week period and was cross sectional in nature (Saunders and Lewis, 2012). The researcher used a semi-structured, face to face interview process to collect, primary data from the perspective of individuals in the insurance industry (Saunders et al., 2007; Nowell et al., 2017; Elliot & Timulak, 2005). The semi-structured interview was based on the stated research objectives which served as a guide for the study and interview. The questions were based on readings from the available literature such that theoretical sensitivity was applied in their formulation (Elliot and Timulak, 2005). The qualitative, semi-structured interview method offered the flexibility of open-ended questions (Saunders & Lewis, 2012) that was desirable in gathering new insights on InsurTech, and the influence it may have to spur innovation on existing insurer business models. This allowed the researcher to generate themes from each interview question and, through combining them with the researcher's understanding of the relevant theory, deeper insights were generated.

4.3 Population

A population is defined as the collection of individuals, objects or groups that represent the focus of scientific inquiry (Saunders & Lewis, 2012). The sampling population for this study focused on existing insurance firms in the South African insurance industry. For this study, the short-term insurance industry is defined as insurance brokerages, InsurTech and incumbent insurers. The researcher selected 10 senior individuals as representatives from both local and multinational firms whose organisations are based in Johannesburg, South Africa.

4.4 Unit of Analysis and Unit of Observation

The influence of InsurTech on existing insurers business model is being studied. Therefore, the unit of analysis was at the organisational level, however, the unit of observation will focus on the individual level since a qualitative in-depth study on individual responses will be analysed. The individual level is described by leaders and individuals in existing insurance companies who are involved in InsurTech related activities (Saunders & Lewis, 2012). The unit of observation considered relevant to this study are executives and senior managers of existing insurance companies. Moreover, these individuals are recognised as the most appropriate research participants, as they are more likely to provide richer insight and understanding on the topic for the researcher.

4.5 Sampling Method and Size

A non-probability purposive sampling method will be used for this study. Using purposive sampling initially, the researcher's judgment informed the selection of the sample to best answer the research questions at hand (Elliot & Timulak, 2005). In general, qualitative research typically employs broad sampling such that all the important aspects and variations of the studied phenomenon are drawn and captured in the sample (Nowell et al., 2017).

At first participants were enlisted from existing insurance industry contacts known to the researcher. Then through the snowballing technique additional research participants were identified. This method was considered appropriate as it was the most effective in terms of the time allocated to this study (Nowell et al., 2017; Marshall, 1996). Individuals that were relevant to the research topic were carefully selected by the researcher to limit lowered data quality collection and credibility (Marshall, 1996). Research participants were selected based on their roles with in their organisation, the nature of their business unit, and their involvement in making decisions that impact the structure of their organisations business model. Multiple individuals from the same area of business within the organisation were avoided to ensure diversity in responses. This sampling method was considered appropriate, given the difficulty in accessing the research participants at their level of seniority (Saunders et al., 2007).

The number of research participants will be kept to less than 20 (Crouch & Mckenzie., 2006). In practice the number of research participants were determined as the study progressed. It was the researchers' intention to interview 12 research participants. The criterion of saturation was used to determine the final number of 10 research participants. Theoretical data saturation is defined as the next interview where no new categories,

themes or explanations have emerged (Fusch & Ness., 2015; Marshall., 1996). The researcher determined saturation as the point where no new information, insights or themes emerged. Since qualitative research studies do not use the power of analysis to determine the number of people in the sample size the criterion of saturation is considered appropriate (Elliot & Timaluk, 2005). Moreover, given the nature of the data collected smaller sample sizes are generally accepted (Elliot & Timaluk, 2005). This was confirmed using the method proposed by Ando, Cousins & Young (2014) where the research takes note of each new code over the course of analysing the interview data and plots this out visually to as in the figure below.

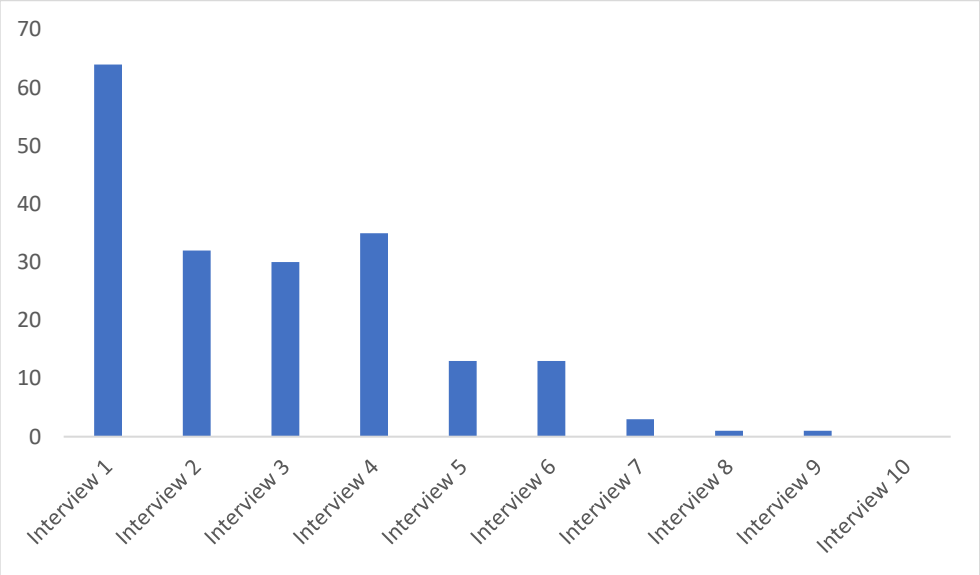

Figure 7:Number of new codes generated per interview

4.6 Measurement Instrument

Semi-structured interviews that covered themes and open-ended questions (Saunders & Lewis,2012) related to InsurTech, technology, business models, and business model innovation were explored using an interview guide. Careful attention was paid to the development of research questions considering elements such as style, language, and variability. Interview questions were generally phrased in a nondirective manner (McCrakken,1988) such that close ended questions, leading, or framed questions were avoided.

The interview guide consisted of simple, open ended and neutrally framed questions, to uncover a rich narrative from the individual that described their perspective towards the influence of InsurTech on existing insurer business models. It was important for the researcher to ensure questions remained open-ended and not probing in nature (Silverman, 2011). The interview guide facilitated the semi structured interview process

by allowing the researcher to follow a general structure by deciding what the main questions were that needed to be asked in advance (Saunders &Lewis, 2012).

This measurement instrument is considered appropriate as this approach allows the research participants to answer clarifying questions from the interviewer to adjust the course of the interview, whilst allowing the participant spontaneity to elaborate. (Marshall, 1996). In addition to the latter, semi-structured interviews also assisted in capturing the spontaneous emergence of themes (Elliot & Timaluk, 2005; Marshall, 1996). This method offered a flexible technique for this small-scale study (Marshall, 1996).

The researcher structured the interview guide such that the first few questions allowed the research participant to feel comfortable and begin the conversation in friendly manner. This was done such that the research participant felt open to share any opinion or perspective related to the topic. The researcher used follow up questions and prompts to inquire further into certain elements brought up by the participant to facilitate a more deeper discussion. McCracken (1988) suggests planned prompts are especially useful as an opportunity for participants to perhaps consider or discuss topics or phenomena that may not have readily come to mind. McCracken (1998) also notes that the open framework of a two-way conversation that is embedded in semi structured interviews one of the main advantages associated with method.

The interviews were conducted individually, with the researcher granting confidentiality and non- disclosure of names or other discerning information of the research participant.

4.7 Piloting of The Interview Guide

The interview guide was piloted on three research participants to test for clarity in understanding the questions, the use of jargon that is not easily understood, and the efficiency in collecting data (Sanders & Lewis, 2012). In the pilot interviews, the content of the interview stayed within the InsurTech, business model, and business model innovation constructs. Therefore, the interview questions were not revised as they were aligned with the concepts under investigation.

4.8 Data Collection

The interview process was based on the core purpose of uncovering the perspective, insights and opinions of individuals in the insurance industry on the influence of InsurTech on existing insurers business models. Once research participants were identified and agreed to participate in the study, formal meeting invites were sent out and

then confirmed a day prior to conducting the interview. The researcher preferred to conduct face to face interviews with the research participant. The interview process began with the researcher signing a non-disclosure form with the research participant, explaining the consent form, and asking for permission to take an audio recording.

The interviews followed the semi-structured format discussed above and were conducted outside of the research participants place of work in a quiet, private meeting area to avoid any trustworthiness issues with data collection in audio-recordings (Saunders & Lewis, 2012). Special attention was paid to ensuring the atmosphere was hospitable for the participant and that the researcher carried a benign attitude throughout the interview. The interviews lasted for approximately 20 – 30 minutes and involved audio-recording and note taking activities (Douglas, 2003; Saunders & Lewis, 2012). The researcher applied discretion in exploring the topic beyond the time limit guided by the level of engagement of the research participant.

4.9 Data Analysis

A phased approach was used to analyse the data collected during the semi-structured interview process. The six-phase thematic analysis described by Nowell et al., (2017) and Elliot & Timaluk (2005) was used in this study as the data analysis approach. The phases are described in the in detail in the figure below.

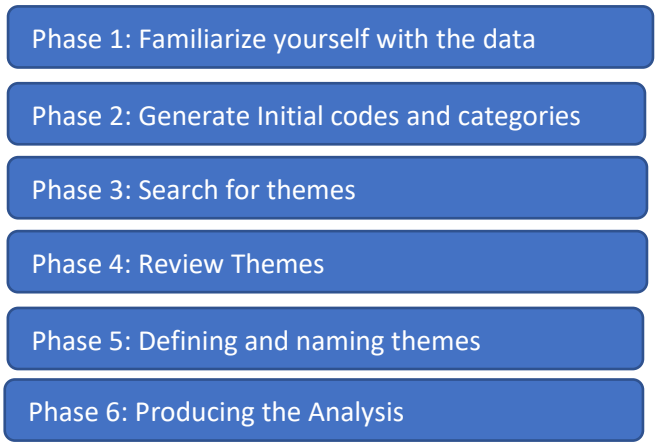

Figure 8:Phases of Thematic Analysis (Nowell et al., 2017; Elliot & Timaluk, 2005)

In preparation for the first phase the researcher transcribed the audio data collected from the interview with the research participant verbatim. The researcher ran phase one in parallel with data collection to identify when the point of saturation for the study had been reached (Nowell et al., 2017; Marshall, 1996). The transcripts were pre- analysed by the researcher with the intention of getting a clearer picture of the InsurTech phenomenon being studied. It was found that during this stage insights and understandings began to

emerge as pointed out by in Elliot & Timaluk (2005) in their study of thematic analyses. Phase two described by Attired-Stirling (2001) as an interpretive step. The researcher used Excel to begin coding passages of the text data using a coding framework made up of specific words, theoretical constructs and research topics (Attride-Stirling, 2001).

Once the textual data was coded according to specific criteria codes that were common or could be coherently grouped, they were placed into categories, before moving on to phase three, four and five. To complete the latter phases, categories were organised into themes by reviewing the textual data in the context of the categories that were previously established, after which overarching themes were generated. The themes were then refined and rearranged into a thematic network to explore underlying patterns and trends that could be reported in phase six. This method of data analysis was considered appropriate as it allowed the researcher to apply an inductive, exploratory approach to answer the research question from the qualitative data collected. The thematic analysis was done manually using Microsoft Excel to analyse the data.

4.10 Data Trustworthiness and Integrity

Trustworthiness is described by Nowell et al., (2017) as one way that researchers can motivate that the findings of their study is worthy of attention. The concepts of credibility, transferability, dependability and confirmability to refine trustworthiness for qualitative studies (Nowell et al., 2017; Shenton, 2004). Credibility is defined as dealing with the congruency of findings with reality. To create credibility, the researcher used the well-established method of thematic analyses to evaluate the qualitative data collected. The researcher also gave research participants the opportunity to refuse to participate or withdraw from the interview at any point. The latter ensures the data collection only involves those research participants who genuinely wanted to offer their thoughts, opinions and insights on the research topic and share this data freely (Nowell et al., 2017, Marshall, 1996; Sheraton 2004).

In addition to the latter, the researcher used iterative questioning methods and evaluated previous findings in academic literature for congruency with the findings in this study. Sheraton (2004) argues that transferability of results from a qualitative study is an unrealistic aim and more importance should be placed on key factors such as context. To address dependability and conformability, the researcher ensured that the processes were detailed in-depth to allow the reader to assess the extent to which the study followed adequate qualitative inquiry practices.

4.11 Research Limitations

The purpose of this study is to understand the influence of InsurTech on existing insurer business models. InsurTech is a recent Fintech phenomenon in the financial services industry that has only recently gained research attention from a social sciences perspective, as a result there might be a lack of available research studies (Schueffel, 2016). Lee & Shin (2018) point out the lack of academic literature on InsurTech compared to the available information from commercial sources. There is an inherent opportunity in this limitation as it has the potential to identify gaps in the literature for future research.

The chosen measurement instrument of this study may also be a limitation of the study, as the researcher may have not included a question that, in retrospect, may have been necessary to draw more complete insights to answer the research question. This limitation is likely to reveal itself after the completion of the data collection during data analysis. The planned prompts in the interview guide may also be a limitation, as it may have added a leading element to the questions.

In this study data is primarily self-reported from the research participants and may prove difficult to verify independently. The research participants are likely to include potential sources of bias in their responses to the researchers' questions. The researcher aimed to mitigate this limitation as much as possible by looking for incongruences across the study with data from other academic sources on the topic. Another limitation might be the lack of openness and transparency of the interviewees during the interview process.

Other possible limitations to the study include accessibility to executive and senior management at incumbent insurer organisations, as well as longitudinal effects, as this study will be conducted over an 8-week period. These limitations are likely to be compounded by the time constraints placed on the researcher in conducting the study and the lack of resources that can be dedicated to the study. Considering the choice of methodology and research design discussed above, it is considered an applicable approach to answering the research questions and fulfilling the purpose of this study.

4.12 Ethical Considerations

To ensure that the research was conducted in an ethical manner, the researcher obtained a letter of ethical clearance from the universities ethics committee. Research participants were asked to sign consent forms to participate in the study and to inform them of the confidentiality of their answers and ability to withdraw from the interview at

any time without prejudice (Refer to Appendix A) before the interview began. To ensure anonymity, the names of all the firms and research participants that took place in the study were given unique codes.

5 CHAPTER 5: RESEARCH RESULTS AND FINDINGS

5.1 Introduction

This chapter presents the results of the data gathered during ten research participant interviews conducted over an 8-week period. The results presented below reflect the interpretation of the data by the researcher as they relate to the research objectives and questions of this study, previously defined in chapter one and three respectively.

The results reflect the thoughts, opinions, perspectives, and insights of ten research participants in the insurance industry. The data that informed these results was collected through a semi-structured interview process and included open-ended questions to allow research participants the freedom to express their views on the topic at hand. The interview guide based on extant literature was a useful tool in that it allowed the researcher to explore topical trajectories with the research participant, and where appropriate, to develop a keen understanding of the influence of InsurTech on existing insurers business model. The results are based on themes that were highlighted during a thematic analysis of the data by the researcher.

This chapter begins by presenting a description of the research participants in the study followed by the presentation of the results by research question.

5.2 Description of The Sample

Table 2: Description of Sample

Participant	Company	Position	Description
P1	C1	Commercial Business Head	Local Commercial Insurer
P2	C2	Head of Underwriting	Local Commercial Insurer
P3	C3	Product Development Actuary	Local Commercial Insurer
P4	C4	Head of Risk Management	Multinational Commercial Insurer
P5	C5	CEO	Multinational Commercial Insurer
P6	C6	Head of Claims Fraud	Multinational Insurance Brokerage

P7	C7	Head of Risk Management	Multinational Commercial Insurer
P8	C8	Head of Claims	Local Commercial Insurer
P9	C9	CEO	Local Personal Lines Insurer
P10	C10	Head of Innovation	Multinational Re-Insurer

The names of the participants and organizations were obfuscated to ensure anonymity for the respondents. As can be seen from the table above, research participants were selected from both local and multi-national insurers. Research participants from each area of the insurance value chain were chosen to increase the richness of the data collected around the influence of InsurTech on existing insurers business models. All the insurers interviewed, barring the local InsurTech insurer, are over 20 years old. The top four oldest existing insurers in the sample are aged 187, 138, 100 and 98 years old.

A total of ten research participant interviews were conducted. The research interviews collected data through semi-structured face to face interviews with executives and senior managers throughout the value chain of the insurance industry. All research participants interviewed for this study were included in the interpretation of these results. Research interviews were conducted face to face at the place of work of the research participant. Interviews took place in a quiet meeting room to allow uninterrupted audio recording and note taking. Research participants were given the interview guide before the interview to allay any concerns that research participants may have had about the nature of the questions.

5.3 Research Question One

What are the challenges currently facing existing insurers?

This research question aimed to understand what the challenges are that existing insurers find their organizations facing in the current business context. Interview questions (refer to Appendix B) sought to establish what research participants identified as challenges in the insurance industry, why they thought these challenges arose, and how they related to the current business model of the insurance industry. The views of the research participants strongly agreed with each other, with many indicating that if these challenges are not addressed soon, more complicated challenges are likely to develop in the insurance industry some research participants even questioned insurers existence in the future.

Table 3 illustrates the themes that emerged while analysing data from interview questions one to four. In the table, the top 4 themes are ranked by the number of interviews in which this theme was discussed.

Table 3: Themes for research question one

Rank	Challenges	Frequency
1	Changing Customer Expectations	10
1	Traditional Business Models	10
1	The Emergence of InsurTech	10
2	Legacy Systems and Outdated Infrastructure	9

From the table above, the top four themes were strongly expressed in all the ten semi-structured interviews conducted. From the frequencies associated with each theme it is apparent that research participants feel these challenges are important for existing insurers to pay attention to. Many research participants felt that insurers are aware of these challenges yet continue to maintain the status quo. Interestingly, they spoke of these challenges being the drivers of InsurTech in the industry. These themes will be discussed in detail below as they relate to research question one.

5.3.1 Changing Consumer Preferences

Table 4 provides a summary of the challenges that existing insurers that were identified by the research participants as they relate to consumer preferences.

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Table 4: Constructs related to challenges

Rank	Challenges Related to Changing Customer Expectations	Frequency
1	Changing consumer engagement needs	17
1	Increased consumer uptake of new technologies	17
1	Faster, simpler, more efficient expectations from insurers	17
2	Consumers want less human interaction in insurance	14
3	Changing insurance demographic	10
4	Products are not as relevant to the changing business environment	8

From the interview data it was clear that existing insurers perceive changing customer expectations as one of the biggest challenges facing existing insurers. Research

participants mentioned that this challenge has far reaching implications, if any business is no longer able to communicate with their consumer their relevancy may be brought into question. All research participants spoke of challenges related to their ability to satisfy, create, and deliver value to their clients. Research participants spoke of changing engagement needs between clients and their insurers as the environment increases in complexity. Consumers now live fast paced, technologically enabled lifestyles, and the need for their insurance provider to align with their lifestyle is greater than before, as clients show increased uptake of new internet and mobile technologies.

All research participants mentioned the changing demographic of insurance consumers as a formidable challenge, many mentioned millennials. Research participants pointed out that millennials and others are now looking for simplicity, speed, and efficiency in their interactions with insurers. Research participants went further to mention that these consumers want to be able to access insurance products on alternative distribution channels with less intermediation and human interaction.

The Head of Underwriting at a local insurer mentioned that consumers now have the advantage of access to information from a variety of sources at their fingertips. The access to information has educated consumers about the dynamics of insurance and this has, to a large extent, altered their expectations of insurers and how insurance products are delivered.

P2: "*I think now…now that we're going into a very tech-savvy space people want to engage insurers very quickly and have a simplistic answer that comes back at lightning speed. So, it's the speed and efficiency aspect… that is driving a lot of the new business in insurance – the new InsurTechs in the market"*

P7*: " Ja..so people don't want to engage face to face… they don't want to speak to a broker, they don't want to speak to anybody… They want an App or want to do it via the internet or via an email. They don't want to engage at a personal level"*

Most research participants supported that of P7, however several research participants countered this view, positing that the human relationship aspect of insurance can never really be eliminated. It emerged that while consumer expectations of insurers are changing with respect to technology, they are still comforted by human interactions in some instances with their insurers. According to the interview data, consumers are most likely looking for a hybrid offering that balances technology with human relationships.

P4*:" There is still a certain amount of personal interaction that people want because insurance is a comfort offering and it's a product that is not very well understood. So*

sometimes as a customer you want somebody to shepherd you in how you busy your insurance"

P6: *"like I mentioned earlier they might not always want an APP or some link up to the insurance company where they can quickly update their insurance to add on this or add on that or monitor their claims. They want the comfort of a broker because it is also the way that they feel they get value out of paying those premiums"*

Speed was highlighted as one of the main differentiators of the future for insurers by the head of claims at a local insurer.

P8: *", For the past 10 years, we've seen speed as the main differentiator. People have become impatient and businesses…. they've come to an understanding that their clients are no longer able to wait for them."*

P2: "*One's got to get to a decision and get to the decision quickly and I think from a speed and efficiency point of view, if I understand your question correctly, is that what is going to influence people transacting with you as an insurer"*

The interview data indicates that consumers are changing their expectations of insurers and that existing insurers are aware of this challenge. Most participants confirmed the results presented above, adding that this is one of the most important challenges that needs to be addressed.

5.3.2 Traditional Business Model

Table 5: Constructs related to a traditional business model

Rank	Challenges related to having a traditional business model	Frequency
1	Does not cater to new emerging risks like cybercrime or social media	**21**
2	Generic products and processes, low industry differentiation	**15**
3	Lack of innovative technology components in business	**13**
4	Complacency	**10**
5	Limited distribution channels	**5**

The interview data showed, without exception, that the business model underpinning existing insurers is far too traditional and is losing relevancy for the changing risk landscape of the current business environment. The interview data, shown in Table 5 above, suggests that traditional business models are outdated and lack innovation, particularly when it comes to technological aspects. Most research participants spoke of

a lack of innovative technological components in existing insurers and how this has reduced upsell distribution channels, with several pointing to complacency as a possible reason. Many research participants agreed that the insurance business model has remain unchanged since its inception, with one participant referencing Lloyds of London's 332-year-old insurance business model.

The interview data suggested the traditional business model is not able to deal with new emerging risks like cyber-attacks and social media damage, as it has failed to keep innovating at the same pace as the risks have emerged or changed around consumers. While many research participants pointed out that the traditional insurance business model has proven itself resilient throughout history, they questioned whether certain parts of the value chain remain unchanged, and that other inter-industry players (like Google and Facebook), who have innovated quiet extensively, will erode this "advantage", disrupting the industry as we know it.

The head of innovation at a multinational re-insurer mentioned that the current insurance business model still works in certain aspects of the value chain but warns against a lack of innovation.

P10: *"It's probably a business model that was invented many, many, many years ago with a specific goal in mind and I think it responded very well to clients at that point in time and that's why it kind of stayed the way it has been operating for a long time … there's lots of stuff about the insurance that's really good and working but I guess the reality is that the world is changing, and changing very quickly….that does require the insurance industry to re-assess their business model"*

P5: *"Since Lloyd's we started with the marine insurance and I look at for example our expense ratio as an industry, you know, we still hovering on between 20…I would say between 25%-30% expense ratio as an industry meaning that we have not found efficiency gains in the history of insurance. You know? While we look at other industries, they have found efficiency gains, they have simplified processes, they have introduced technology; and insurance model is pretty much the same and static"*

The head of risk management at one of the oldest insurers in the world points out that the traditional business model means that differentiation is low between insurers as the industry tries to do the same thing in the same way it's been done for years.

P4*:" The existing dinosaur is ambling along…. there is nothing really differentiating the capabilities of insurers in the market these days".*

P9: *"The incumbents are saying, let's keep the status quo, because there is profit in it, if it's not broke don't fix it right?"*

In one case, the research participant alludes to an internet services provider becoming competition to existing insurers as their business models have allowed them to build capabilities beyond their industry into others.

P4*: "There is no doubt technology is playing a huge role. I think there is this concept of the data and aggregators and all of that is becoming a very powerful thing. The question is will insurers still be around in fifteen, twenty, thirty years. The likes of Google have the data to compete, it would be very interesting"*

Another case, mentions a social media company with the ability to enter the insurance space.

P6: *"I mean Facebook already has so much data about you and they understand what type of user you are and how to insure you. Google is the same thing, they are saying that, we have so much data and so much research and so much money that we can actually start selling insurance products, across all lines, health, short-term, easily, quickly, over the phone, internet"*

5.2.3 The Emergence of InsurTech

The emergence of InsurTech as a theme was without exception cited as one of the biggest challenges faced by existing insurers. The interview data is summarised below in Table 6.

Table 6: Constructs related to the emergence of InsurTech

Rank	Challenges related the emergence of InsurTech	Frequency
1	A threat if existing insurers don't innovate	**24**
2	InsurTech meets consumer needs around speed and efficiency	**22**
3	InsurTech offers consumers relevant products customized pricing	**16**
4	Innovative business models that cannot be copied easily	**5**

Interestingly, research participants agreed with each other, citing the emergence of InsurTech as a certain threat if existing insurers do not begin to innovate themselves. Although seven research participants agreed with the latter, they also spoke of InsurTech as an opportunity. Research participants mentioned that existing insurers can integrate or partner with InsurTech to innovate certain parts of the insurance value chain.

Research participants highlighted claims, underwriting, and distribution as those parts of the value chain that InsurTech will most likely impact. The interview data suggested that traditional business models are a challenge that will require business model innovation at the core to solve.

P5: *""InsurTech know there's new risks, there's emerging risks that are coming through so if we're going to use the tradition model, the traditional way of doing things we will be, you know… we will be in the back end. And we will not be relevant in the future and we will lose…. So, it is very key that the companies in the industry do look into that space because it's a threat"*

P1: *"I am watching and waiting for the silver bullet. I think that Insure Tech has the potential to revolutionise insurance business"*

In three cases, research participants identified InsurTech as a short-term threat but also a forward-looking opportunity that is built to exist within the existing insurance business model.

P3: *"I think they are a threat. But they will co-exist"*

P1: "*So I think the challenge that you are going to have is that insurers will likely not … uhm … re-engineer their entire business model but use elements of Insure Tech as an opportunity to improve what they are doing and to try and leverage some of the benefits"*

P9: *"I think they are a threat, but...um...I also think that they're evolving insurance"*

In one case, a research participant highlights the opportunity around the challenge of InsurTech and offers the following insight:

P10: *"…So, there's definitely elements of the value chain that Insure-techs can add value to, so I guess especially from the digital experience and that kind of thing. But can the entire insurance business model have broken or challenged? I don't think so"*

5.2.4 Legacy Systems and Outdated Infrastructure

The interview data suggested that legacy systems and outdated infrastructure are a compounding challenge that amplifies the challenges faced by existing insurers outlined in the themes above.

Table 7:Constructs related to Legacy systems and Outdated Infrastructure

Rank	Challenges related legacy systems and outdated infrastructure	Frequency
1	Inefficient claims handling and payment processes	**30**

2	Slow manual processes (Labour intensive operations)	**17**
2	Lack of flexibility and agility	**15**
3	Poor digital client experience	**12**
4	Low levels of customer service	**8**

As shown in Table 7 above, research participants highlighted the claims process as one of the biggest challenges that legacy systems and outdated infrastructure present for existing insures. Research participants mentioned that many customers choose insurers based on the speed at which they process claims. All research participants highlighted legacy systems and outdated infrastructure as a shortcoming that exposes the industry to InsurTech players, as it prohibits existing insurers from being agile and flexible enough to keep up with changes in the rapidly developing business environment and changing consumer expectations.

In general, research participants agreed with each other, attributing slow manual processes that are inefficient due to legacy systems and outdated infrastructure as a factor that hampers their organisations ability to deliver the superior customer value. Three research participants, felt strongly that legacy systems are responsible for the poor digital client experiences that their organisations deliver. Low technology adoption rates were also mentioned by research participants as a consequence of legacy systems, and the primary inhibitor for the lack of their ability to respond to changes in the market fast enough.

P5: *"We still traditionally look at solving issues using old systems. If you look at some of the systems that have been put in place, I've work for different companies; the front end looks different but guess what, the back end is still the same engine"*

P3: *"The same claim systems, legacy systems and we probably don't have the flexibility to change and start again as we should when new things come up."*

P1: *"a lot of our insurers work on legacy systems, legacy environments, where the … just the sheer magnitude of having to implement an element of new technology or a … uhh … a technology-driven component is too great to think of"*

5.2.5 Summary of Findings for Research Question 1

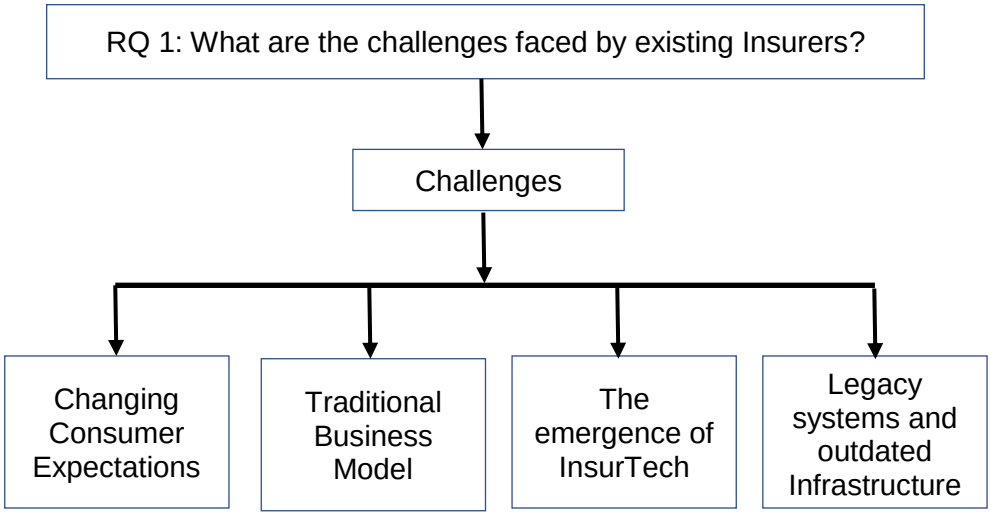

Figure 9:Summary of results for research question one

The results for research question one showed that research participants in the sample agreed there are challenges facing existing insurers that are all in some way related to change caused by the onset of technological advancement in the insurance business environment. In general, research participants agreed that the changing consumer expectations of the consumer is one of the key driving forces that is causing insurers to re-examine their traditional business models. The lack of flexibility and agility due to ingrained legacy systems and outdated infrastructure within the existing insurers organisations, is a serious Achilles heel for the insurance industry. Many supported the view of legacy systems eroding business value and possibly jeopardising their business operations as they unable to adapt fast enough to leverage the technological advantages that are presenting themselves.

5.3 Research Question 2

Does InsurTech have the potential to spur Business Model Innovation (BMI) for existing insurers?

This research question aimed to understand the perspectives of research participants around how InsurTech can spur business model innovation for existing insurers. The interview data collected from interview questions five- seven, gave insight into how and where business model innovation may take place for existing insurers according to research participants. Table 6 below illustrates the top three themes that emerged from the interview data. In the table 6 the top three themes are ranked by the number of interviews in which this theme was discussed.

Table 8: Themes for research question two

Rank	Challenges	Frequency
1	Customer Centricity	10
1	Competitive Advantage	10
1	Operational Efficiency	10

In Table 8 above, the top three themes were equally expressed with strong sentiment in all ten semi-structured interviews conducted. From the frequencies associated with each theme, it is apparent that research participants felt that these are these themes will drive business model innovation and are equally important for existing insurers to pay attention to. These themes will be discussed in detail below as it relates to research question two.

5.3.1 Customer Centricity

The constructs related to how customer centricity will spur business model innovation for existing insures is shown in Table 9. This table was drawn from the interview data collected as it related to customer centricity. In general, research participants highlighted those perspectives related to the customer journey, digital customer experience and tailored products and services.

Table 9: Constructs related to how customer centricity

Rank	Constructs related to how customer centricity will spur BMI	Frequency
1	Improved Client Journey (making insurance easy to buy and understand)	**18**
2	Improved customer delivery through technology (claim approval, after service, instant broker advice)	**11**
3	Leverage data to provide tailored client products and solutions for each individual	**10**
4	Faster client service and product delivery through digital media platforms (internet, mobile and mobile applications)	**8**
4	Improve customer relationships (Reduce gaps between insurer and client - instant access through apps, chat bots)	**8**

All the research participants in the study mentioned how InsurTech re-aligns the purpose of insurance back to the customer through the concept of customer centricity. This view was held strongly by four of the research participants in the study. The interview data

showed that research participants felt InsurTech can spur business model innovation for existing insurers by changing how the industry thinks creating value for their customers through product design, customer delivery (digital channels), and claims processing.

Many felt that through the inherent customer centric element embedded in InsurTech, business models would call for existing insurers to revisit their current model and think about how to enhance the client journey, increasing the ease with which insurance can be bought, and reduce the product complexity using technology. Most research participants mentioned InsurTech' ability to make the customer journey simpler and more efficient as a key business model innovation, mentioning (without exception) its ability to meet the digital claims experience that customers are expecting from their insurers. In addition to the latter, research participants felt strongly about the ability of InsurTech to provide tailored, customized, customer centric products and offerings to suit their individual needs.

P6: *"To me, InsurTech means quick, it means simplified, it means individualised, as we were speaking about earlier bespoke solutions and…for me the simplicity is very important'*

P8: "*if you think about it from a claims point of view… Insure-tech I think will be able to impact the client greatly: speed and accuracy and meeting the customer's needs. Even before the customers have a claim, we would be able to know beforehand and start working on resolving it or putting them back where they need to be"*

In another case the research participant highlighted the ability of InsurTech to align with the clients already digitised lifestyle.

P5*:" Our clients world is getting digitalized. look let's start with …if you're looking for insurance. You need to then phone someone, you need to sit on the phone with someone or meet a broker or fill in forms and, you know, it can be a tedious process. While today the companies like Lemonade ... within a few minutes you can get your quote done. You know? you want to do an adjustment on the policy … get onto the app that's already on his phone and you just update…"*

5.3.2 Competitive Advantage

Most research participants highlighted that InsurTech would result in a competitive advantage for existing insurers by spurring change throughout the value chain, particularly in areas involved in data analysis that inform more accurate risk selection, pricing, distribution, and underwriting. The interview data shows that the competitive

advantage afforded by InsurTech will spur business model innovation throughout the value chain as shown in Table 10 below.

Table 10: Constructs related to competitive advantage

Rank	Constructs related to how Competitive Advantage will spur BMI	Frequency
1	New sources of data and data aggregation abilities (product differentiation through underwriting and pricing risks innovatively)	36
2	Advanced client and risk selection (Leveraging the new technologies in risk modelling)	31
3	Integrated systems architecture and infrastructure (Flexibility)	18
4	Offering products through new sales channels and platforms	13
5	Reduce waste in the business model (Cost savings through technology adoption)	7

All research participants, without exception, spoke about how InsurTech will increase an existing insurer's competitive advantage, as it allows for more powerful data aggregation capabilities using new sources of data that will lead to product differentiation. Research participants spoke about the ability to collect granular information from new sources of data from artificial intelligence, data aggregation, wearables, and other IoT devices, and how it will allow existing insurers to differentiate themselves from their competitors through underwriting and pricing risks innovatively through product differentiation. Eight research participants felt strongly that InsurTech will allow existing insurers to select risks more accurately (thus lowering their loss ratios) and increasing their profitability through predicative risk modelling facilitated by InsurTech.

Research participants shared the perspective that integrating InsurTech into their business models would provide them with unique systems and architecture that would differentiate them from their competitors and provide them with the flexibility and agility to respond to changes in the environment at a rate faster than their competitors. Research participants also spoke of InsurTech spurring business model innovations that would allow existing insurers to leverage different distribution channels through technology that other insurers, who have legacy systems, may not be able to access. Research participants specifically referenced mobile InsurTech providers like Naked and Lemonade, who they perceive to do this very well. Two research participants referenced

the competitive advantage through cost savings that InsurTech would introduce in the existing insurer business model over other insurers who do.

P4: *"… I think there is a lot of developments in the insurance space. There is no doubt technology is playing a huge role. I think there is this concept of the data and aggregators and all of that is becoming a very powerful thing for actuaries and insurers"*

Research participant 10 suggests that InsurTech will allow existing insurers to leverage technology though data collection that will change how products are conceptualised through new sources of data.

P10: "*Ja, with technology and with the access to more data, and maybe more relevant data and all kinds or sources of data, your pricing model should become more scientific and a lot more appropriate over time. There's the issues of artificial intelligence, which means that you could, effectively, rate a risk for certain products more regularly and accurately than insurance companies can do right now"*

The head of risk management for a large multinational insurer agrees, adding that by integrating InsurTech into the existing insurance business model, the company will increase its ability to differentiate itself in the competitive environment.

P4: *"…in terms of business flow or process flow or the insurance operation will be a lot slicker …better than the others…so like understanding the type of occupancy, the hazards, the exposure for that specific occupancy with AI, machine learning and more tech, it will set you apart from the other guys out there"*

In one case the interview data suggested that InsurTech will innovate the distribution channels that will lead to a competitive advantage.

P8: "*We've seen how new companies like OUTsurance, King Price and MiWay, they have grown at such a rapid pace over the last ten years, using the internet, smart phones...um…social media…that the traditional insurers haven't used, and they've reached new markets and they've expanded the insurance market to markets we wouldn't ordinarily have had in insurance"*

5.3.3 Operational Efficiency

Table 11:Constructs related to operational efficiency

Rank	Constructs related to how operational efficiency will spur BMI	Frequency
1	Fast and Simple Claim handling process (Agile Processes)	24

2	New ways of doing underwriting faster	15
3	Reduced manual processes	8

From Table 11 the interview data suggested that InsurTech would introduce internal operational efficiencies, particularly in the claims process. Three research participants felt InsurTech would allow existing insurers to leverage technology for new and improved processes and speed cost savings, thus achieving operational efficiency and business model innovation. All research participants clearly mentioned the role of technology in achieving the latter. The sentiment that technology is an important driver for operational efficiency was a constant construct that was supported by all ten research participants in this study.

P7: "So *for me, I think InsurTech will help redirect the costly business centres, for example it will result in a steer away from call centres… reduce the operating costs ".*

P1: "*you'll find that there's a lot of waste, often that adds on incrementally as a result of traditional ways of doing business over a period of time. What I believe Insure Tech has done is identify aspects in the value chain that could be done … uhh … better. That could be improved. Those aspects could be, you know, speed in terms of distribution"*

A research participant suggested that InsurTech will allow internal process to be streamlined, less manual, and more integrated. He added that through the operational efficiency gains the added benefit would be a smoother client delivery experience.

P4: " …*With technology you can interact with your client efficiently… can go paperless etc, satisfy the client that you can deliver the end product through an electronic mechanism whether it's on your smart phone, whether it's on your iPad, whether it's on an internet link, whether you need to go on a platform or whatever."*

In one case the research participant highlighted the ability of InsurTech to reduce internal manual processes resulting in labour cost savings.

P9: *"…the insurance operation will be a lot slicker. In terms of the administrative side will obviously be a… be a huge cost saving at the end of the day because it will be less labour intensive"*

P8: *"I guess it's about being aware it's there, being aware that it is making a difference in the industry and how you can take some of those techs and incorporate it into your strategies to make yourself more effective"*

5.3.4 Summary of Findings for Research Question Two

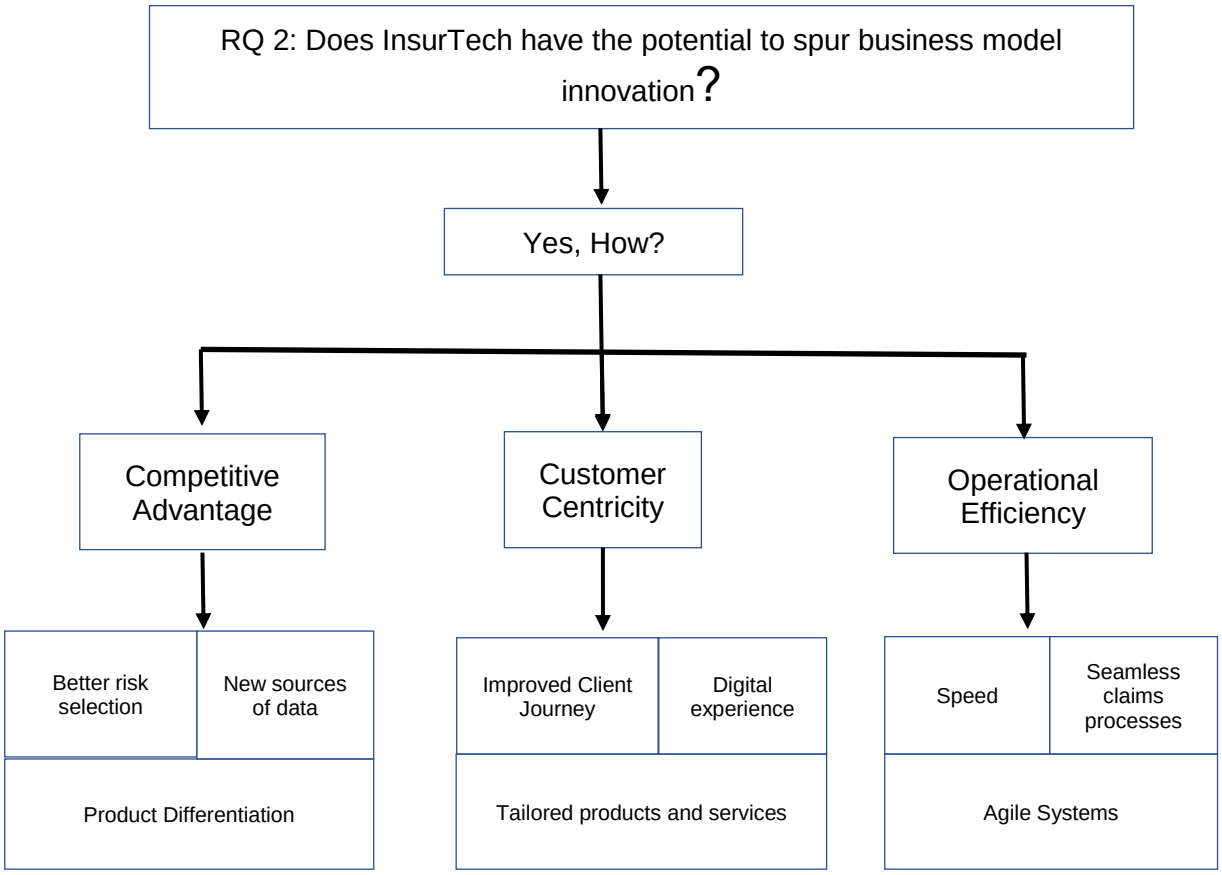

Figure 10:Summary of results for research question two

In answering research question two the interview data strongly supported the role of InsurTech in spurring business model innovation for existing insurers through customer centricity, creating a competitive advantage, and introducing operational efficiencies enabled by technology. It was found that InsurTech, when combined with certain elements of the existing insurance business model, would be able to facilitate high levels of customer centricity by leveraging technology and data to design tailored solutions to meet individual customer needs and enhance product delivery such that it creates value for customers. The interview data showed that InsurTech through customer centricity would reduce the distance between the client and the insurer, improving their journey from the start (inception) to policy renewal with faster response rates, new sales channels, and high claims focus. InsurTech was also reasoned to spur business model innovation through creating a unique competitive advantage for existing insurers, as insurers would then be able to actively select better risks, generate more accurate risk profiles, and underwrite innovatively. Lastly, InsurTech can spur business model innovation through operational efficiencies by introducing cost savings through speed

and simplicity, particularly in the claims process. From this Research question the interview data up until now has supported the view of InsurTech being a potential driver for business model innovation. Research participants have indicated that business model innovation in important for insurers to maintain their relevance into the future.

5.4 Research Question Three

What are the gaps between existing insurance business models and the business model needed to respond to InsurTech?

This research question aimed to establish the insights and perspectives of research participants as to what the gaps are between the current business model of existing insurers and the business model that is needed to respond to InsurTech. Research participants identified two possible responses to InsurTech 1) through integration or partnership and 2) as a threat. Research participants highlighted areas that InsurTech business models excel at when identifying gaps that are present in existing insurer business models. Research participants felt strongly that gaps, identified in Table 10, should be closed if existing insurers are to respond either by integrating InsurTech into their business model, or to InsurTech as a threat. Table 10 illustrates the top three themes that emerged while analysing data from interview questions seven to eight. The themes displayed in Table 10 and are ranked by the number of interviews in which this theme was mentioned.

Table 12:Themes for research question three

Rank	Themes	No. of mentions
1	Target Market	10
1	Revenue Model	10
1	Customer Value Proposition	10

From Table 12 above, as with research question two the top three themes were strongly expressed in all ten semi-structured interviews conducted. From the frequencies associated with each theme, it is apparent that research participants feel these gaps are equally important and must be addressed if existing insurers are to respond to respond to InsurTech.

From the interview data it was found that many of the research participants do not see InsurTech as an ominous threat, but more as a partner in creating value for the entire value chain. This has been shown recurrently in research question two and three.

Considering the latter, most research participants highlighted gaps in the existing business model that existing insurers should fill to respond such that they are able to integrate or co-exist with InsurTech. However, the same research participants qualified this perspective by specifically mentioning that if existing insurers do not bridge the gaps that have been identified, it is very likely that InsurTech will threaten their existence in the future, their relevance will be questioned, as InsurTech will move to become the "incumbents" in the industry.

5.4.1 Target Market

Table 13: Constructs related to target market

Rank	Constructs related to gaps in the existing insurer business model	Frequency
1	Underserved Market	33
2	Profit focus on the top 10% of the market	14
3	Low Penetration rates	4
4	Digital Tech Savvy Market	5

Nine research participants agreed that the largest gap in the existing insurance business model is the current target market focus. These research participants emphasised the strong focus of existing insurers on the premium portion (top 10%) of the market. From the interview data, research participants felt strongly that the neglected "underserved" market in the insurance industry, particularly in South Africa, is the biggest reason why there has been an upsurge of InsurTech in the industry. Another aspect of the target market that research participants felt existing insurers are aware of, but not changing fast enough with to keep pace, is the digital tech savvy market.

The Head of Claims for a local insurer suggested that existing insurers have largely ignored the needs of the "underserved" market and have therefore have invited InsurTech into the insurance space. He mentions that InsurTech can cater to those markets because innovative solutions are a part of their corporate make-up. He suggests, as do others, that this is the largest gap that the existing insurance business model needs to fill to be able to respond to InsurTech

P8:*" …if you look at the penetrations specifically in our market of insurance… it still is, limited to very few individuals and organisations as well. You'd have to be a medium or a large-sized company or a sophisticated buyer or an LSM5 upwards for you to buy into insurance. So, the uptake on it is still low, it's still under 20% in South Africa, but what about the others?"*

... "I think if they don't realise and recognise the growing needs of other LSMs, I believe that there are players that are going to come out, outside insurers, that are going to provide similar types of solutions and clients will start doing that"

P10 who works for one of the oldest insurance organisations in the sample (138 years old) adds that the existing insurance business models will evolve when they re-focus on the needs of other targets markets.

P10: ", *I think the insurance industry has served a certain sector of the population very well, umm, but there's a large proportion of the market that is not serviced by the current insurance … we probably need to re-look at who are the people that we're serving"*

P2*: "Whereas the new boys on the block; the Lemonades, the Pineapples, the Insure Techs, the Nakeds, they want to focus on that percentage of the market and that'll erode your white elephant very quickly"*

In one case, partnering with InsurTech is mentioned as a solution that may address the target market gap that has been identified.

P9*: I think, they really need think about serving the underserved, in a real positive way, not based on how much money we can make, but actually building communities. …our prime focus is to build communities…let's use insurance for the good, rather than take as much that's available. Let's build it in a way that everyone who participates, benefits*

5.4.2 Revenue Model

Table 14:Constructs related to revenue models

Rank	Constructs related to revenue model	Frequency
1	Lack of shared Value in revenue Model	12
2	Re-direct profit focus (still motivated by unmeaningful profit)	14
3	Social impact	7
4	Purpose	3

Seven research participants linked the revenue model of existing insurers to one of the most important gaps, in their opinion, that needs to be addressed going forward to respond in a sustainable manner. Research participants made strong statements with reference to the shallow profit and cost focus of existing insurers, citing it as one of the main reasons that insurers may jeopardisee their existence and relevancy in the future.

Research participants contrasted existing insurers profit and cost focus to that of InsurTech shared value revenue model, where the focus is not detracted from profit but

re-directed towards mechanisms that create value for the clients first and then lead to profit. Research participants felt that addressing this gap would align with closing the gaps in target markets identified in the theme above.

P1: *"what you're seeing InsurTech companies do, is solving things in a different way … so they're solving things to … perhaps to break the business model of saying we want to make a profit from a good sale or a good service, but how do we create value for a client from which profit will result"*

The Head of Underwriting alludes to a gradual erosion of profits for existing insurers if their revenue models are not re-aligned to the profit generation strategies that go beyond their current focus. He cites this gap as imperative to close since InsurTech have already started making inroads in this aspect from his perspective.

P2: *"You know, it's pointless dealing with a strategy that's only going to generate 5% of your income in 10 years' time then best you change your strategy to deal with what's coming your way. Because if you don't evolve at the same rapid pace you're going to be left behind"*

In one case altruism is mentioned as the mechanism that should be driving the revenue model of the existing insurer for a more sustainable business model going forward. The research participant adds that existing insurers are blinded by existing profits and should close this gap in the current business models to respond adequately to InsurTech.

P9: "…*they are still making profits, and they are still making super profits in South Africa. So, they go, it's ok, we still have the ability to increase the market. The motive is not just profit… the… motive should be altruistic really, its…it's often about creating a better product…drawing up correlations from different kind of events and people... so we are collecting data, and in return for that data we are giving you good pricing"*.

P6*: "…What is our business here for? Are we here just to make money? Are we here to meet a wider need and in so doing make some money…?*

In another case, the research participant adds that we've seen the effect of not changing the revenue focus before in other industries if the revenue model gap is not closed. He also mentions that changes should be real for clients.

P1: *"There are still healthy margins to be made off the existing structure and business model. With the result that I think insurers are too cautious to create any real change, …so a business model is performing well, buts it's that old kind of kodak story you know, so until someone comes in and messes you up properly"*

5.4.3 Customer Value Proposition

Table 15: Constructs related to customer value proposition

Rank	Constructs related to Customer Value Proposition	Frequency
1	Customer value creation	24
2	Customer Centricity	22
3	Inclusive products and services	18
4	Improved client Journey	16
5	Technology Adoption	13
6	New distribution channels	8

In general, research participants agreed that existing insurers should close the gaps in their current customer value proposition to respond to InsurTech in a sustainable way. This requires existing insurers to re-evaluate the customer value proposition that they offer their clients in terms of how they create value, the customer centricity around their offering, and how technology is integrated in the delivery of the latter. This theme was almost always mentioned together with the themes of target market and revenue model.

This suggests that research participants link customer value proposition to the way the insurance industry generates revenue and for whom they create value. Many research participants mentioned that existing insurers have "destroyed value" for clients by complicating the purpose of insurance. One research participant spoke about how not incorporating technology sooner has diminished the customer value proposition for existing insurers.

P3: *"Can we go back to the day where you pay your premium and whatever happens you sorted"*

In one case the research participant pointed out that existing insurers need to clarify their customer value propositions to respond to InsurTech in an appropriate manner, because InsurTech have gone to market with a different focus that is not as closely aligned with profit as in the current business model, but more towards where they can create value for the entire value chain and most importantly the client.

P6*: "I think the value proposition and knowing customers and the interaction and engagement with them are absolutely critical"*

P5: *"… we need to align ourselves with what's happening to the insurance industry and speak the same language for our customers"*

P9: *"So, insurance needs to change the mind-set around from profit motive to what's the actual purpose…. So, once you get that right, consumers are changing the way they buy products. They don't buy your product by your brand, they buy product by reputation. Do I want to be associated with that brand? Do I see value in me being part of it? And consumers are going, "Ja, I do"." OK*

5.4.4 Summary of Findings for Research Question Three

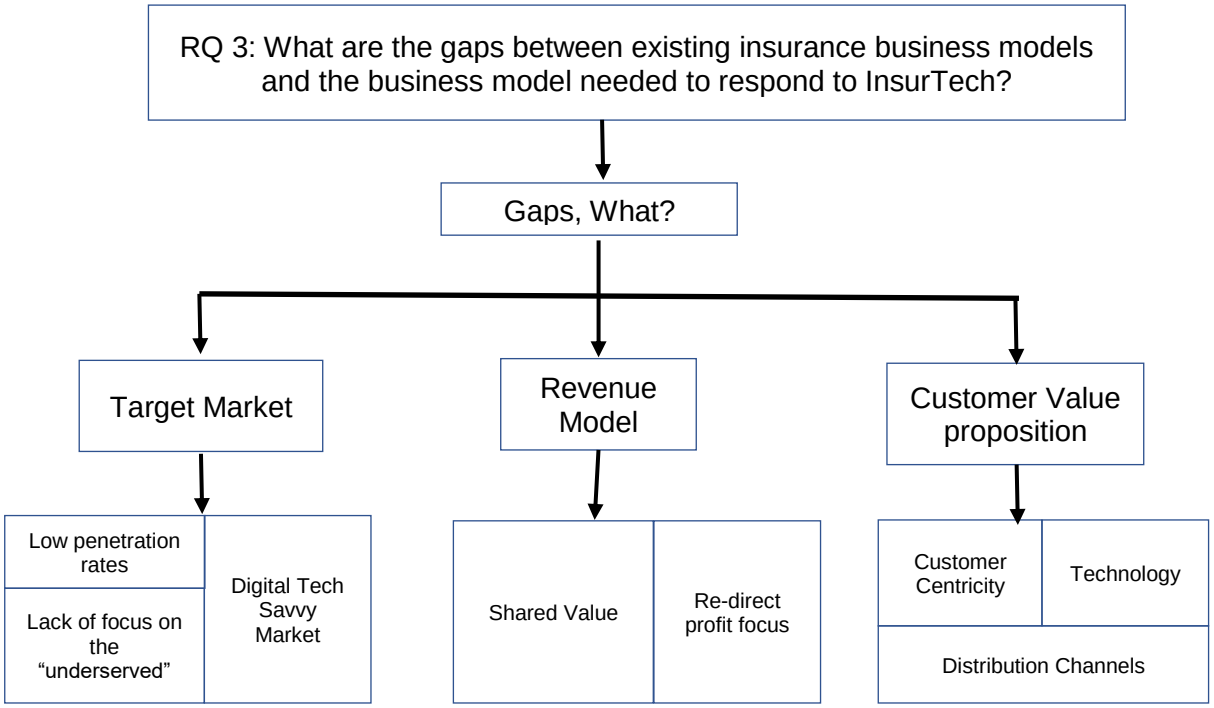

Figure 11: Summary of results for research question three

In answering research question three, it was shown that the major gaps between the existing insurance business model and the one that is needed to respond to InsurTech addresses the core elements of a business model. Specifically, those elements related to existing insurers target market focus, customer value proposition, and the revenue model. It was shown that InsurTech are using technology and technological innovations to expand the market with a customer value proposition that creates and delivers value inherently into their revenue model for organic profit growth. Research participants perspectives aligned with the latter and were of the opinion addressing the gaps presented in the themes above would move existing insurers closer to the business model of an InsurTech player. Thus, the interview data suggested changing the nature of the relationship between the target market, revenue model, and customer value proposition of existing insurers towards value creation is necessary for existing insurers to even begin to formulate an adequate response to InsurTech.

5.5 Research Question Four

What capabilities do existing insurers need to close those gaps that have been identified?

This research question aimed to understand what capabilities existing insurers need to ensure that they can close the gaps identified in research question three. Most research participants highlighted constructs that not only allow existing insurers to adequately close the gaps in their business models, but also to be able to evolve their business model to one that is able to co-exist in the market with InsurTech. Table 14 illustrates the top three themes that emerged while analysing data from interview questions nine to ten. The themes displayed in Table 14 are ranked by the number of interviews in which the theme was discussed.

Table 16: Themes for research question four

Rank	Themes	No. of mentions
1	Human Capital	7
2	Leadership Mindset	5
2	Corporate Innovation	5

From Table 16 above, as with research question two the top three themes were expressed by at least seven of the ten semi-structured interviews conducted. From the frequencies associated with each theme it is apparent that research participants feel these capabilities are needed to address the gaps identified in research question three.

5.5.1 Human Capital

Table 17:Constructs related to human capital

Rank	Constructs related to Human Capital	Frequency
1	Skills (Data Scientists, analysts, programmers)	26
2	Innovative people	19
3	Younger human capital	8

The interview data suggested, without exception, that human capital is a critical capability that existing insurers need to focus on to close the gaps related to all three themes raised in research question three. Human capital in terms of scarce skills like data science, analytics, and software development were noted as important in reaching new targets markets as new innovative product designs and products are needed to meet that segment's needs and exploit the new technology that is available.

Many research participants suggested that a need for younger people with those skills are required for their fresh outlook, and to put a new perspective on the way existing insurers think about generating revenue and rise to the challenge of meet changing consumer preference for their own age groups. Most research participants added that it is important to build strategic human capital assets within existing insurers to re-align their business models with the client value proposition needed to respond to InsurTech.

P3: *" we might need are the data scientists, the data analytics type and software engineers…"*

P6: *"I think we are going to have to find really smart people that can find these kinds of solutions… you need curious minds, you need people that are passionate for change and I think the insurances companies don't always have those kinds of people"*

P1: *"Talent is key, so we need to relook at talent, exceptional talent and where we get talent from. Not only data scientist and programmers and all sorts of things, but we need to appoint creative people, philanthropic. Etc*"

P8: "*I think skills, having the right people with the right mindsets with an understanding of technology at a strategical level to be able to drive change"*

5.5.2 Leadership

Table 18:Constructs related to leadership mindsets

Rank	Constructs related to Leadership	Frequency
1	Leadership buy-in and drive for InsurTech	29
2	Commitment to investment in InsurTech	21

The interview data suggested that leadership mindsets was equally as important as human capital in building up capabilities to respond to InsurTech. Again, without exception, all research participants made strong statements about the importance of leadership buy-in and commitment towards change in addressing the gaps mentioned in research question three. Four research participants highlighted the importance of being led by those with the foresight to change how existing insurers can integrate InsurTech into the existing business model to make themselves relevant in the future. Most research participants mentioned that to close those identified gaps, investment, funding, and financial commitment would be needed would only come from leaders who have bought into the change with the right mindsets.

P7: *"...you need someone in your business that will drive this. You someone with an awareness of it and drive it. Again, I say you need buy in at the highest level. Because if you don't have that type of buy in then you won't have the budget or scope to do this."*

The head of claims makes mention of the conflicting priorities that insurance companies are facing when committing funding and investing in InsurTech. Other research participants agreed with this view highlighting that leaders who are consumed with operational and shareholder interests may present inertia for existing insurers innovating their business models to include InsurTech.

P8: *"one of the other things that I recognise or that I see is the commitment to funding… companies (insurance) are asking themselves…can I afford to make that initial investment today…Or do I respond to the year-to-year demands, the expectations of shareholders. And I think that that is part of the challenge we are having, is that not enough companies (insurance) are willing to make that long-term investment and take a financial knock in the short term"*

Interestingly, nine research participants made mention of combatting the complacent leadership mindset as an imperative capability that existing insurers need to build in order to innovate the existing business model to be future ready:

P9: *"From a business perspective, the incumbents, the decision makers…there is a disconnect from a strategic view, and the people that are seeing the burning platform within the industry to the people that execute. And that disconnect is because the incentives are wrong, so I have worked for about 20 years in corporate, so I can tell you, incentives are wrong"*

The executive head of a commercial business at a local insurer points out that companies need to build a capability that challenges the complacency mindset to rationalise investment in the InsurTech space.

P1: *"think about something like blockchain, great idea, great ability to use the distributed ledger to facilitate effective claims payments etc. But the upfront investment that is going to require for us to change our model is massive whereas right now you phone me, you fill out the antiquated first notification of loss, I do it, I create it on my legacy system and it's done and dusted"*

P10: *"it's because they're still kind of comfortable, right? They're making money, they're making the shareholders happy, they're still growing within the market that they operate. So, there isn't, I think, enough of a threat to them right now to make them change what they've been doing for a while*."

5.5.3 Corporate Innovation

Table 19: Constructs related to corporate innovation

Rank	Constructs related to Leadership Mindsets	Frequency
1	Corporate innovation hubs	9
2	Corporate innovation culture	3

Five of the ten research participants spoke about the need for existing insurers to incorporate innovation into their organizational culture and the need for the creation of innovation hubs to support human capital initiatives in building innovation capabilities to respond to InsurTech and address the gaps identified in research question three. Of the ten research participants, only one is a part of an organization that has begun to create innovation hubs to innovate their existing business model with respect to InsurTech.

P6: *"I can tell you that there is a huge drive to change our business model. Hubs have been set up to actually work, think tanks. Ok, this is how we have been doing it all these years. In the next two years how are we going to change it."*

The CEO of a listed multinational insurance companies supports the initiatives being carried out by the research participant 6 pointing out that more existing insurance players need to have that mindset to continue remaining relevant to consumers in the future or leveraging the opportunities presented by InsurTech.

P5*: "alternatively you need to…the industry will be in incubation, incubators and find ways of how you're going to disrupt yourselves because if you don't want to do that, it's already happening"*

5.5.4 Summary of Findings for Research Question 4

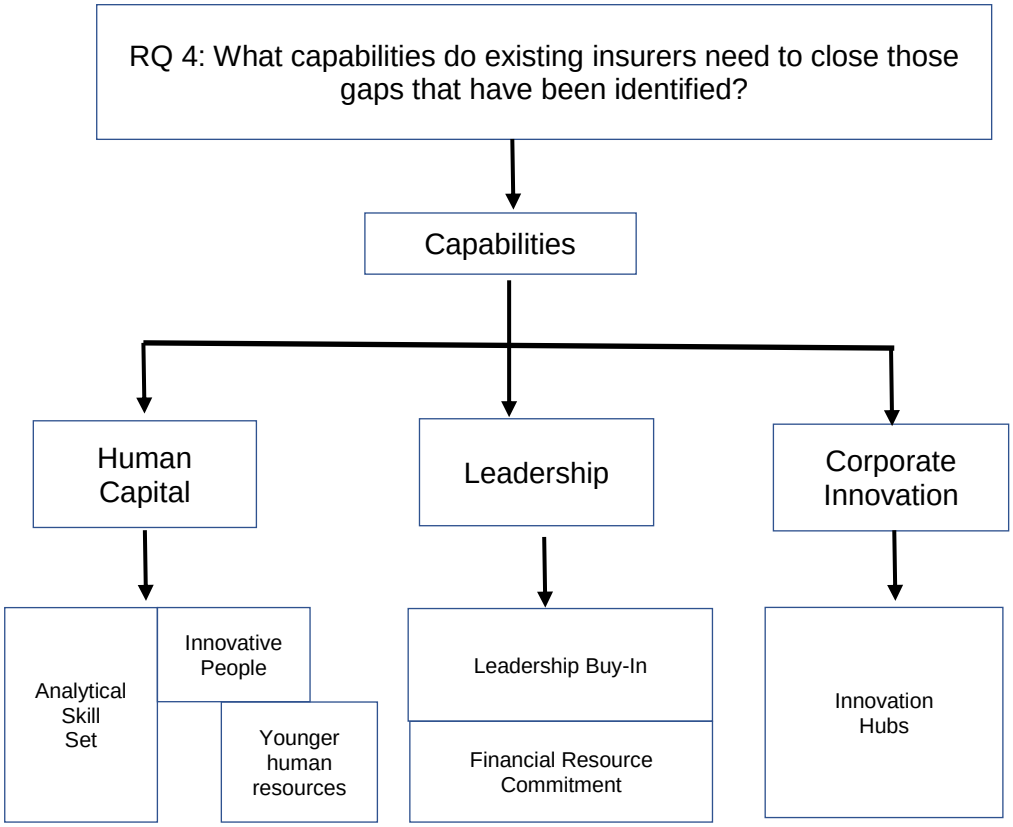

Figure 12: Summary of results for research question four

In answering research question four, it was shown that the most important capabilities that existing insurers need to focus on to address the gaps covered in research question three are centred around the organisation, leadership mindsets, and corporate innovation. Since InsurTech by its nature is employs innovative technology, an adequate response by existing insurers would require innovative people. Human resources were identified as key capabilities that existing insurers need to build, focusing on scarce skills in the technology space. It emerged that building leadership mindset to embrace, support and build capabilities for insurers are an imperative capability. It was shown that human resources and leadership mindset capabilities were important to build to feed the third capabilities that is needed which is corporate innovation. The interview data felt strongly about corporate innovation and corporate innovation efforts in supporting existing insurers in closing the gaps in their current business models.

5.6 Conclusion

The results of the four research questions supported the views of extant literature on business models, business model innovation, the ecosystem, and influence of technology in the financial services industry. The insights, opinions and perspectives reflected in the research data depicted what challenges existing insurers are facing and

what is driving the emergence of InsurTech in the insurance industry. Interestingly, most research participants offered contrasting views with some of the literature related to InsurTech as a threat to the insurance industry. It was shown that InsurTech should rather be viewed rather as an opportunity for existing insurers to evolve insurance for a better customer value proposition offering, but not without existing insurers addressing challenges of changing customer expectations, legacy systems, and infrastructure and their traditional business models.

It emerged that business model innovation is required by existing insurers to adequately respond to InsurTech. It was found from the data that existing insurers would like to innovate their business models by integrating with InsurTech, but first need to address pertinent gaps in their existing models related to their target market focus, the underpinnings of their revenue model, and their embedded customer value proposition. Building capabilities such as human resources, supportive leadership mindsets and corporate innovation hubs were thought to be critical in closing those gaps. In chapter 6 the research results and findings from Chapter 5 will be discussed in further detail and linked to the literature review.

6 CHAPTER 6: DISCUSSION OF RESULTS

6.1 Introduction

This chapter provides a detailed discussion of the results from the thematic analysis of the data collected during ten semi-structured interviews as outlined in chapter five. In this chapter the results are discussed as they relate to each research question addressing the influence of InsurTech on the existing insurance model explained in chapter three and then interpreted using the literature review outlined in chapter two. The discussion will compare the research results with extant literature building on the academic concepts of business models, business model innovation and FinTech in the financial services industry outlined in chapter one. The chapter will conclude with a summary of the results discussed providing the basis for the development of a model on how the various research questions will interact to determine the influence of InsurTech on existing insurers business models presented in chapter seven.

6.2 Discussion of Research Question One Results

What are the challenges currently facing existing insurers?

The first research question focused on understanding what the challenges are currently facing existing insurers and why research participants thought these challenges may have arisen. The results for research question are summarised in Figure. 10 based on a thematic analysis of the interview data. The analysis revealed the top four themes of the

challenges identified by research participants in the study. From the data analysis, it emerged that the current challenges facing existing insurers are also widely recognised as drivers of technological innovation in the financial services industry (Dapp, 2014). Not surprisingly, the challenges mentioned by research participants were similar to the challenges experienced in the banking industry. In the banking industry, these challenges powered the growth of FinTech's like the blockchain and spurred business model innovation across the industry (Lee &Shin, 2017). While these challenges are not unique to the insurance industry, scholars believe it is likely to have a more significant influence on the existing insurance business model in comparison to the banking sector because of its traditionally low rate of technological adoption (Caitlin &Lorenz, 2017).

Table 20:Top four themes of research question one

Rank	Themes (Factors) for Research Question One
1	Changing Customer Expectations
1	Traditional Business Models
1	The Emergence of InsurTech
2	Legacy Systems and Outdated Infrastructure

6.2.1 Changing Consumer expectations

The literature suggests that the traditional balance between the customer and the supplier has shifted as a result of recent developments in the global economy, information technologies and consumer access to information (Teece,2010). As a result, the power of digitally advanced and informed consumers has risen leading to a change in their expectations of suppliers to meet their varied needs since the number of alternatives have become more transparent (Teece, 2010). Research participants agreed with Teece (2010) and spoke about changing consumer expectations as one of the biggest challenges related to the way insurers currently create and deliver value for their customers. Research participants mentioned changing engagement needs with their chosen provider. The results indicated that consumers have come to expect that insurers will leverage digital channels to host and distribute their products and services to them. Baden-Fuller & Haefliger (2013) attributes this change in consumer behaviour to the profound effect of digitisation as a result of the advancement in internet and mobile technologies. Puschmann (2017) and Bussmann (2017) explain that more and more consumers are now transacting online in a more cost -effective and efficient manner amplifying consumers expectations of their financial services provider. The results found

that consumers want a seamless digital experience across a multitude of channels mirroring the findings of Bussmann (2017).

The results indicated that changing consumer expectations are amplified by the uptake of new technologies particularly by tech-savvy consumers. Research participants believe the surge of millennials entering the market have strongly influenced the change in consumer expectations. Lee &Shin (2018) give substance to this result, noting that over the next few decades, millennials will account for the largest part of the population and prefer to consume digital and FinTech products (Dapp,2014).

The study showed that research participants were convinced that consumers expect fast, simple and more efficient experiences with their insurers. Interestingly, Catlin & Lorenz (2017) found that the modern consumer wants speed, simplicity and efficiency in the burgeoning digital age regardless of the service or the service provider. Considering the latter, it is not unexpected that consumers are changing their expectations of their insurance provider in this regard. Research participants identified legacy systems and outdated infrastructure as the largest hurdle to overcome in rising to the challenge posed by changing consumer expectations. The extant literature supports this finding indicating that interoperable, flexible systems integrated with new technologies will enable insurers to meet the changing expectations of their consumers (Lee & Shin, 2018; Bussmann, 2017; Catlin & Tobias, 2017).

6.2.2 Traditional Business Models

The traditional business model underpinning the existing insurance industry was cited by research participants as an equally important challenge to the other themes. The results found that the existing insurance model is outdated and lacks the innovation required to adapt to the changing risk landscape and business environment. The OECD (2017) substantiates this finding as they too, question the ability of existing insurers to respond to new and non-traditional risks given outdated competencies of the current business model of existing insurers.

The results found that if existing insurers do not innovate their traditional business models, it will lead to an even bigger challenge, one of proving their relevancy to consumers in the future. Yan et al., (2018) upholds the latter noting that the insurance industry has a 300-year-old business model. Catlin &Tobias (2017) explain that while the traditional business model may have proven itself resilient in the past, the emergence of new value propositions as a result of technological development in the insurance industry will undermine the existing insurance business model. In support of this finding, Teece (2010) argues that business models must change over time with changing

markets, technologies and legal structures suggesting failure to innovate in context of the environment will result in displacement by new relevant business models.

Most research participants mentioned that the complacent attitude of existing insurers serves to further exacerbate the already significant “traditional business model” challenge. Sosna et al., (2016) mentions that established organisations have to renew their existing business models to continue their ability to create and capture value not only for themselves but for all their stakeholders, and in doing so, existing firms have to move past organisational inertias like complacency and other such lock-in effects.

Baden-Fuller & Haefliger (2013) believes technology is linked to business models and presents an opportunity for incumbents to consider new and more relevant business models. Similarly, research participants felt that traditional business models increase the resistance to integrating new and innovative technologies that would allow insurers to move away from generic products and processes to remain relevant and differentiate themselves.

6.2.3 The Emergence of InsurTech

The emergence of InsurTech was the third challenge mentioned by research participants. Interestingly, the results showed that research participants felt the emergence of InsurTech in the insurance industry presents two challenges: 1) InsurTech is a threat to existing insurers and the failure of existing insurers to innovate their business model will lead to them being eliminated and 2) the challenge of not integrating with InsurTech start-ups faster than other incumbent players will lead to a loss of market share. The interview data supports Lee &Shin (2018) findings in this regard who posited while traditional financial institutions initially treated FinTech start-ups as threats, they are increasingly shifting their focus to collaborate with these companies.

Research participants felt strongly that the innovative business models of InsurTech present a threat to existing insurers because InsurTech are able to meet consumer expectations through speed, efficiency, individualised policy underwriting and policy pricing. Bussmann (2017) comments that FinTech companies have the advantage of differentiated business models, agility and operating in a largely unregulated environment over existing providers. Catlin & Lorenz (2017) notes that FinTech’s are not held back by legacy stems like many traditional players in the financial services industry. The interview data also suggests that research participants felt the threat would be even more sinister if existing insurers fail to innovate their business model since InsurTech already have the upper hand when it comes to manoeuvrability. Similarly, Sood & Tellis

(2011) warn that incumbents who underestimate the impact of FinTech's will likely to lead to their demise pointing to FinTech in the banking industry as an example.

The OECD (2017) is of the same opinion, noting that InsurTech business models are addressing the insurability of consumers with the help of technology to simplify and tailor insurance policies to suit their individual needs unlike existing insurers today. In addition, Catlin &Lorenz (2017) add that InsurTech are also making it possible to buy complex products over digital channels and are extending their offering to cover the emerging risks of today like cyber and the "sharing economy". In general, academics agree that there is both an opportunity and threat considering the emergence of InsurTech for existing insurers in agreement with the results found in this study (Dapp, 2014; Lee & Shin,2018, OECD, 2017).

6.2.4 Legacy Systems and Outdated Infrastructure

Research participants raised legacy systems and outdated infrastructure for existing insurers as a critical challenge facing existing insurers and one that is significantly hampering the digital transformation required in the industry. Catlin & Lorenz (2017) points out this is a widely shared characteristic of existing insurers. Research participants agreed that legacy systems present a challenge for existing insurers because it limits the organisations ability to keep up with the changing business environment hampering their ability to remain flexible and agile in the face of technological change. In support of this view, Bussmann (2017) goes further adding that financial services organisations have built large, complex, proprietary systems that do not easily interface with other platforms.

The results indicated research participants felt that legacy systems and outdated infrastructure heavily compound the challenges of changing consumer expectations, the threat around the emergence of InsurTech as well as the challenge of traditional business models for existing insurers. Yan et al., (2018) and Catlin &Lorenz (2017) comments that the insurance industry lacks in digital maturity because of the slow rate at which existing insurers adopt technology. Traditionally, high barriers to entry in the previously impregnable insurance market meant that insurers had no incentive or competition to update their systems and infrastructure (Pollari, 2016: Catlin & Lorenz, 2017). Kuo Chuen & Teo (2015) add that as a result existing insurer have had no reason to innovate the technology component of their business model. This agrees with the results as the sentiment of complacency in existing insurers by research participants was strongly expressed throughout the themes related to challenges.

6.2.5 Summary of Discussion for Research Question One

Research participants identified four factors namely: changing consumer expectations, traditional business models, the emergence of InsurTech, legacy systems and outdated infrastructure as the main challenges that are currently facing existing insurers. These challenges are largely related to the external market pressure associated with technological development, tech-savvy consumers and the rapidly developing business environment (Baden-Fuller & Haefliger, 2013; Skan et a.,2016; Lee & Shin, 2018).

The first three factors were given equal importance with respect to the magnitude of the challenge they represent for existing insurers. The first, changing consumer expectations has resulted from new needs around engagement with an insurance provider by consumers. These expectations have moved towards a digital experience requiring insurers to meet their needs through digitised channels, using technology to create and deliver products and services. Research participants linked this change to the changing consumer demographic of “tech-savvy people/millennials” whose lives are increasingly being integrated with digital offerings from all industries.

The second, traditional business models were considered a challenge due to lack of innovation by existing insures to keep pace with the changing risk landscape. Research participants questioned the sustainability of such a model given the degree technological advancement that has taken place in the current business context. Surprisingly, the third challenge, the emergence of InsurTech (FinTech in the insurance industry) was considered as a challenge with an implicit opportunity. The two-pronged challenge related to InsurTech as a threat to existing insurers and as an opportunity that InsurTech can be integrated into their existing business models. The fourth challenge, legacy systems and outdated infrastructure was determined to be a critical and is the consequence of the slow rate of digital transformation in existing insurers. Legacy systems and outdated infrastructure compromises the ability of existing insurers to address the top three challenges mentioned above through a lack of flexibility, interoperability and organisational agility.

6.3 Discussion of Research Question Two Results

Does InsurTech (FinTech in insurance) have the potential to spur Business Model Innovation (BMI) for existing insurers?

This research question sought to understand the insights from research participants as to how InsurTech can spur business model innovation for existing insurers. The results draw attention to three specific elements the existing insurance business model that research participants strongly believe InsurTech will influence namely; customer benefit,

competitive strategy and key processes. Baden-Fuller & Haefliger (2013) concluded with similar findings in their study drawing a connection to technology and the influence it has in creating or adapting business models. The three elements (outlined as themes as they emerged from the interview data is summarised in Table 21), dovetail with the elements of a business model that should be adapted to achieve successful business model innovation according to academics (Teece, 2010; Chesbrough, 2010; Johnson et al., 2008). Moreover, Baden-Fuller & Haelfiger (2013) suggest that business model innovation is highly related to technology, suggesting a fundamental link between the two. The summary of the results for research question two are shown in Figure. 10, based on a thematic analysis of the interview data.

Table 21:Top three themes of research question two

Rank	Theme
1	Customer Centricity
1	Competitive Advantage
1	Operational Efficiency

6.3.1 Customer Centricity

From the results it emerged that existing insurers are somewhat disconnected from what their customers wants, and needs are, research participants firmly believed this is because of the heavy intermediation present in the industry. The result showed customer centricity is negatively influenced by the complacent attitude of existing insurers towards their customers, a finding also shown in research question one. Catlin &Lorenz (2017) explains that existing insurers behaved this way because customer ownership was not previously challenged due to the high barriers to entry into the space. Consequently, most insurers were and still are according to the results, comfortable to cede the management of their customers' needs and expectations to intermediaries like brokerages (Pollari, 2016; Catlin & Lorenz, 2017). Research participants reason ceding customer management to brokerages has resulted in existing insurers being separated from their primary customers hence they are not in the position to fully understood their customer's needs, limiting their ability to be customer centric. InsurTech however, has exploited this gap with innovative business models that centres around customer centricity enabled by technology (Dapp, 2014, Pollari, 2016).

Baden-Fuller &Haefliger (2010) highlight that a business model may have to change such that technology can be used to create value in meeting customer needs. The results confirmed this sentiment with most research participants suggesting that existing insurers need to reconsider how they use technology to create value for their customers suggesting they by renew the lenses through which they view their customers journey. Puschmann (2017) refers to the latter as *customer -oriented digitisation*, where FinTech application revolves around the customer and their processes, moving away from product-centricity to using the customer journey as the focal point in product design and delivery. Taking the latter into account, Catlin &Lorenz (2017) reasons that when a customer becomes the basis of an organisations decision frame-work as opposed to being informed by industry and competitor analyses, then a customer centric approach is taking place. An approach strongly supported by the research participants as shown in the results.

Kuo Chuen & Teo (2015) and others believe FinTech has done this exceptionally well in the area of customer centricity, they mention that if existing insurers are to keep pace and remain relevant, customer centricity should be revisited (Bussmann, 2017; OECD, 2017; Lee &Shin, 2018; Skan et al.,2016). The OECD (2017) refers to the rise in recent popularity of InsurTech because of their ability to provide an enhanced customer experience specifically mentioning simplicity and efficiency as their key strengths. Research participants were convinced existing insurers should improve upon the latter for a more connected and refined relationship with their customers. InsurTech enables a more direct relationship with the customer (Pollari, 2016). The strong inclination of research participants to change the nature of how existing insurers create value for their customers through technology suggests that InsurTech has the potential to spur business model innovation for existing insurers using customer centricity as an agent.

6.3.2 Competitive Advantage

Slavova (n.d) remarks that existing insurers have previously excelled in developing complex risk rating, pricing and underwriting models but have been constrained by the traditional sources of information available such as consumer characteristics (age, gender and claims history) and outdated technology according to Catlin & Lorenz (2017). Consequently, Bussmann (2017) observes, there are low levels of differentiation of players in the insurance industry. The results show that research participants agree with the findings of Bussmann (2017), Slavova (n.d) and Catlin & Lorenz (2017) with many research participants calling the offerings of existing insurers generic.

The results indicated that new sources of data made available by new technologies such as IoT, predicative risk modelling, data aggregation, big data analysis and artificial intelligence embedded in InsurTech would provide existing insurers with the opportunity to collect information from new sources of data that can be used to differentiate their product offerings leading to a competitive advantage. Therefore, according to the research results InsurTech would spur business model innovation for existing insurers through creating a competitive advantage. Teece (2010) notes that a competitive strategy analysis in conjunction with an adequate business model design is necessary to protect whatever competitive advantage an organisation has.

The results also showed that research participants felt InsurTech could lower loss ratios improving the overall profitability of existing insurers. through more accurate risk modelling and product innovation. Catlin & Lorenz (2017) study support these results showing a 3-5% improvement in loss ratios for an existing auto-insurer introducing InsurTech. Also, in support of this view, Slavova (n.d) and Puschmann (2017) comment that InsurTech no longer constrains existing insurers to traditional sources of data (customer characteristics) but affords them the ability to leverage real-time risk patterns and trends from non-traditional sources of data to stay ahead of competitive demands in the sector. Puschmann (2017) adds InsurTech can assist existing insurers in calculating and matching risk offerings to customers products that meet their customers' needs.

Hossain (2016) reaffirms the research results observing that business model innovation creates the opportunity for incumbents to stay ahead in areas of product innovation. OECD (2017) suggest that InsurTech will spur business model innovation for existing insurers because of their ability to facilitate product differentiation as found in the results of the study. However, Teece (2010) warns that business model innovation itself will not build a competitive advantage but product innovations that result in increased customer value that cannot be easily copied will.

From the results of research question one it emerged that research participants believed the opportunity to integrate with external InsurTech companies would lead to an increased competitive advantage. Chesbrough (2010) gives substance to the latter noting that external technology partnerships may garner business model innovation.

6.3.3 Operational Efficiency

Slavova (2016) found that technological innovations in the insurance industry are starting to change the operation components in the business models design for existing insurers. Similarly, the research results found that InsurTech will spur business model innovation by introducing operational efficiencies for existing insurers. Research participants clearly

indicated that agile processes and less labour-intensive operations are needed in existing insurance operations. Teece (2010) legitimises this finding noting that business model innovation can allow for greater efficiency and operating flexibility. Baden-Fuller & Haefliger (2013) concur stating that incorporating a new technology into a business model can produce a superior effect possibly resulting in a novel or efficient business model. Lee & Shin (2018) show how InsurTech has achieved the latter with the use of technological innovation in their business models.

Slavova (n.d) comments that operational costs for claims assessments and other insurance related processes are being reduced using InsurTech and at the same time increasing efficiency. Research participants also suggested that InsurTech would pioneer cost savings for the business though lowered operational costs, allowing their organisations to streamline pain points for customers in their registration, renewal and claim processes. Most research perspectives commented on InsurTech as an opportunity to perform tasks faster and more effectively. The OECD (2017) agrees with research participants adding that new technologies in the insurance space can lead to immeasurable efficiency gains.

Moreover, Morris et al., (2005) finds that a firm's processes and activities must be incorporated into their business model in such a way that it considers the customer value proposition it intends to deliver, leading to value creation. Catlin & Lorenz (2017) and most research participants agree that operational efficiency is key factor that will allow existing insurers to meet customer centric expectations, create value for their customers and capturing value for themselves through the resulting competitive advantage. Amit & Zott (2012) also support this sentiment noting that efficiencies are in fact value drivers for business model innovations.

6.3.4 Summary of Discussion for Research Question Two

Sosna et al., (2016) found that established firms have to renew the existing business models to counter threats, create and capture value for others, and themselves (Chesbrough, 2010). In general, research participants shared the opinion that InsurTech has the potential to be a key driver for business model innovation in existing insurers. The extant literature on business model innovation acknowledges that technological change provides several opportunities for incumbents to change their current business model design (Teece, 2010, Hossain, 2016; Chesbrough, 2010, Dapp,2014). Research participants identified three areas where business model innovation is most likely to happen namely: customer centricity, competitive advantage and operational efficiency.

Amit & Zott (2012) confirm that business model innovation can happen in several ways, agreeing with those areas that have been identified by research participants.

Baden-Fuller & Haefliger (2013) agrees with research participants observing that technological innovation has positive effects on business performance. Research participants felt strongly that InsurTech would spur business model innovation for existing insurers by firstly, creating value for customers through product innovation; secondly by customer centricity through streamlined processes and thirdly; by capturing value through a competitive advantage and operational efficiencies. Hossain (2016) and Teece (2010) observes that when value has been created and captured through new design for all stakeholders then business model innovation has occurred.

6.4 Discussion of Research Question Three

What are the gaps between existing insurance business models and the business model needed to respond to InsurTech?

The third research question focused on establishing what research participants view as the gaps that exist between the business model of existing insurers and the business model that is needed to respond to InsurTech. Research participants identified these gaps by examining areas they felt InsurTech business models have excelled in, and that they feel existing insurers should innovate in to close the gaps. In general, research participants felt that fundamental gaps exist in the areas of target market, revenue model and customer value proposition. The results found that if existing insurers do not close the identified gaps in their existing business models, InsurTech business models will have the competitive advantage over them. Dapp (2014) observes that competitors will be forced to leave the market by new technologies and changing consumption behaviour should a structural digital change in the financial services industry not be initiated.

Most research participants agreed with Amit & Zott (2012) that InsurTech offer an innovative business model that allows them to create and exploit new opportunities in the insurance market. Teece (2010) suggests these differences between business models may exist as business pioneers need to excel not only in product innovation but in business model design, customer needs and technological trajectories too.

Table 22:Top three themes of research question three

Rank	Themes (Factors) for Research Question One
1	Target Market
1	Revenue Model

1	Customer Value Proposition

6.4.1 Target Market

The research results found that existing insurers have traditionally focused on a certain target market and as a result have experienced low penetration rates in niche markets, particularly in the lower income bracket. The results clearly indicated that research participants feel the primary focus of existing insurers on the premium market is a gap because it does not allow existing insurance models to exploit new opportunities, create and/or capture value on a larger scale.

The narrow focus of existing insurers on a certain target market means their scope for business model innovation to grow into these markets are limited, Sosna et al., 2016) points out that limited business model innovation is unsustainable and is likely to negatively influence future business performance. Moreover, FinTech efforts are focused on inclusion and are aimed at reaching the “underserved”, this will dramatically influence the ability to of existing insurers to remain relevant according to research participants and academics alike as their products create more social value (Slavova, n.d; OECD,2017; Smit et al., 2017; Lee & Shin, 2018). Hossain (2016) notes ICT firms are able to create value through business model innovation in the lower income segments.

Smit et al., (2018) notes that existing insurance business models are unable to accurately price premiums for the lower income bracket as their model is not built to handle the uncertainty associated with this large market segment. The lower income (“underserved”) market requires an insurance product that is accurately priced and personalised to their needs due to their limited income (Smit et al., 2017). InsurTech promises to cater to these needs addressing the short comings of existing insurance business models with lower cost structures and through the delivery of a better value proposition.

The OECD (2017) like Lee & Shin (2018) found that new technologies utilised by InsurTech offer more relevant insurance products than existing insurers to a wider market particularly to those in the lower income bracket. Moreover, Catlin & Lorenz (2017) mention lemonade and other InsurTech that have grown into niche markets such as pet and travel insurance for diabetics. The results indicate that existing insurance business models will be threatened by InsurTech ability to create, serve and expand into new markets if they do not close the gap related to their narrow target market focus. The

results also show that if existing insurers close the gap in their target market focus they will be able to grow in the sector promoting inclusion.

6.4.2 Revenue Model

A core element of an organisations business model is the logic it uses to earn profits (Morris et al., 2005). The results show that research participants question the logic which existing insurers use to generate their profits. Research participants felt strongly about the gap created due to the profit and cost focus of existing insurers instead of a value creation focus. In support of this view, Spieth et al., (2014) suggests that a business should transform customer value that is created through its value architecture by harnessing the resultant value proposition into profits.

The OECD (2017) notes a distinctive feature of InsurTech business models are the social and environmental considerations and value that lead to revenue generation. Catlin & Lorenz (2017) use the example of InsurTech that use telematics to reduce road accidents showing how they are able to create superior value for their customers that translated into the lock-in that leads to profit generation (Amit & Zott, 2012; Baden-Fuller &Haefliger, 2013).The results indicate that existing insurers need to incorporate more shared value into their profit logic for a more sustainable revenue model (Teece, 2010). Baden-Fuller &Haefliger (2013) warns that an assumption of improving a product or service leading to automatic revenue generation is imprudent clarifying instead, the assumption should be based on value created and captured. Baden-Fuller &Haefliger (2013) provide an example, observing that the same technologies or products commercialised in different ways does not yield the same result, adding that it should be linked to value creation (Teece, 2010). The results indicate the revenue model gap in existing insurance business models opens them up to InsurTech competitors that are creating real change (Amit & Zott, 2012, Dapp 2014).

6.4.3 Customer Value Proposition

Dapp (2014) posits that traditional financial services firms run the risk of losing significance in the future with standardised products and services. The research results showed that there is a significant gap in the customer value proposition for existing insurance business models. Research participants are convinced that consumers want new, tailored and more individualised products and services, a result also found in research question one.

Teece (2010) found that traditional organisations tend to approach customer value propositions as a business model component that does not require as much attention as revenue components. It has been taken for granted that customers will follow demand

supply equilibrium models (Teece, 2010). Catlin & Lorenz (2017) add that new value propositions can develop new markets and match supply and demand in an innovative way.

From the results most research participants agreed that existing insurance business models have prioritised revenue over the customer value proposition. Puschmann (2017) adds that new insurer value propositions should be aligned with risk mitigation, speed and non-traditional distribution channels. InsurTechs are leveraging new technologies to create rich customer value propositions making individualised digital solutions available to consumers, improving their customer journeys and experience (Dapp, 2014). From the results, research participants feel certain that changing the customer value proposition through InsurTech will close the gaps identified. However, Teece (2010) warns that unless a firm can offer a compelling value proposition to consumers with an innovation, it will fail even if the innovation itself is remarkable.

6.4.4 Summary of Discussion Research Question Three

Research participants identified three main gaps between the existing insurance business model and the model that is needed to respond to InsurTech. These gaps are related to target market, revenue model and customer value proposition. The results show that research participants felt InsurTech would threaten existing insurers and undermine their future fitness if these gaps were not closed. Sosna et al., (2016) suggest that business model innovation is needed by established organisations whose future effectiveness is likely to be undermined by changes in the external environment.

According to the results, for existing insurers to formulate an adequate response to InsurTech, their target market focus should shift such that they are more inclusive of lower income and other niche segments. This will allow existing insurers to exploit new opportunities to grow into new markets (Teece, 2010). Secondly, the existing insurance business model should re-direct their concentrated profit and cost focus to value creation for consumers, building a sustainable competitive advantage, Teece (2010) supports this view. Lastly, the existing insurance business model should look at introducing new value propositions through InsurTech providing value through risk mitigation, speed and non-traditional distribution channels (Catlin & Lorenz, 2017).

6.5 Discussion of Results for Research Question Four

What capabilities do existing insurers need to close those gaps that have been identified?

This research question aimed to establish what capabilities are needed by existing insurers to close the gaps that have been identified. The results draw attention to three

specific capabilities that research participants strongly believe existing insurers should develop to close the gaps between the existing insurance business model and the one needed to respond to InsurTech. These capabilities are building human capital, changing the leadership mindset around business model innovation and facilitating corporate innovation within their organisations. These capabilities emerged as themes from the interview data and are summarised in Table 23.

Table 23: Top three themes of research question four

Rank	Theme
1	Human Capital
2	Leadership Mindset
2	Corporate Innovation

6.5.1 Human Capital

Teece (2010) notes that sensing, seizing and reconfiguring skills is not only needed for an organisation to sync with the changing business environment but also to enable the organisation to stay relevant, adapt and change over time. Baden-Fuller &Haefliger (2013) observe that it is important that new knowledge and skills are incorporated into established organisations for successful business model rejuvenation. The results showed that research respondents felt that InsurTech and other new technologies cannot be leveraged to its fullest extent because existing insurers have not yet built up the human capital capabilities needed to drive the change.

The results indicated that data analysts, data scientists, machine learning experts and software engineers are critical skills that are needed to close the gaps in the existing insurance business model. Catlin & Lorenz (2017) observe that data and technical skills are critical business assets for existing insurers to capturing value through the digital transformation process. If investment in to learning and keeping skills up to date is not adapted such that human capital are able to face environmental changes the organisations survival is jeopardised (Sosna et al., 2016). The OECD (2017) notes that new technologies such as blockchain and artificial intelligence used by InsurTech require special skills and expertise. Existing insurers could also build this capability through outsourcing the skills needed by building partnerships with external companies supporting their digital initiative (Catlin & Lorenz, 2017).

6.5.2 Leadership Mindset

Zott et al, (2011) state that business model innovation requires a specific leadership agenda adding that Leadership unity is an important capability needed for organisations to become more agile. Chesbrough (2010) observes that leadership is important in bringing about organisational change to business model innovation. The research results showed that the leadership is a critical capability, needed to support investment into InsurTech and drive the organisational innovation needed to close the gaps in the existing insurance business model.

Sosna et al., (2010) notes that established organisations need to overcome innovation and organisational inertia in their business model as their future effectiveness is likely to be undermined by changes in the external environment. The results indicated that leaders in existing insurers are conflicted in responding to the current needs of the organisation and other stakeholders versus the needs of the organisation for sustained future fitness such as business model innovation. Sosna et al., (2016) show in their study that established organisations find it difficult to innovate their business model while it continues to contribute to revenues and profits. Chesbrough (2010) uses Xerox as an example to show the dangers of leader's cognitive bias in discouraging business model innovation because of their ability to generate greater revenues in the current context. The results found that complacency by leaders in existing insurers creates a disconnect between the strategic view that is needed for the future to close the gaps in the existing business model.

Leadership is important when engaging in business model innovation as investment into new technologies for improvements to products and services maybe expensive and time consuming with returns often uncertain (Hossain, 2016). The trial and error mindset should be embraced by managers to expand their perspectives to be able to find an appropriate business model to commercialise new technologies to capture and create value (Chesbrough,2010; Sosna et al., 2016).

6.5.3 Corporate Innovation

Lawson &Samson (2001) found that organisations that invest and nurture an "innovation capability" are excellent organisations as they lead to innovation in products, services and processes for superior business performance results. Similarly, the results of this study indicate that a corporate "innovation capability" is needed to close the gaps in the existing insurance business model. Research participants spoke of the creation of innovation hubs where business model changes could be investigated. Business model experimentation should be part of an organisations corporate innovation culture but

instead is a reactionary response to difficulties in the market which can be disadvantageous (Chesbrough, 2010). Teece (2010) uses the example of iTunes in the CD industry to show the importance of business model experimentation to probe for business model innovations before external technological innovations cause old business models to be redundant.

6.5.4 Summary of Discussion for Research Question Four

The results showed that the three main capabilities needed to close the gaps between the existing insurance business model and the one needed to respond to InsurTech are the skills, knowledge and experience related to InsurTech namely data scientists, data analysts and software engineers. The latter relates to the first gap that was identified by research participants, human capital.

The second gaps identified related to the role of leadership in supporting business model innovation in responding to InsurTech. The results of this study showed that leadership is a particularly important gap that needs to be filled to prevent organisational inertia and promote commitment, towards investment InsurTech related activities. Finally, corporate innovation is the third gap that needs to be closed to allow for experimentation with business model innovation. It is understood that closing the last gap will allow existing insurers to prevent reacting to changes in the external environment but rather build capabilities to adapt to the changes in the environment (Chesbrough, 2010).

6.6 Conclusion

This chapter presented a discussion of the results of this study as they related to the research questions outlined in Chapter three. It was shown that there are compelling challenges facing existing insurers in the current business environment. The study showed that challenges related to changing consumer expectations, traditional business models, the emergence of InsurTech, legacy and updated systems are also drivers that spur business model innovation. It was shown that business model innovation with respect to InsurTech may be a sustainable solution for existing insurers such that they remain relevant and prevent being undermined by external developments in the market like InsurTech. Business model innovations that should be considered would improve aspects of customer centricity, introduce a competitive advantage and operational efficiencies into the existing insurance business model. The study also showed that there are gaps between the existing insurance business model and the model needed to respond to InsurTech namely; target market, revenue model and customer value proposition. The results suggest that building capabilities that relate to human capital,

leadership and corporate innovation would allow existing insurers to close those gaps that were identified.

7 CHAPTER 7: CONCLUSION

7.1 Introduction

The study set out to explore the influence of InsurTech on the existing insurance business model. The study was conducted in the context of the rapid technological advancement in the financial services industry. This chapter will discuss the key findings from this research study and evaluate them against the original objectives posited in chapter one. The findings and discussion that emerged from the data synthesis in chapter five and chapter six respectively, presented useful information to introduce a new framework that will assist existing insurers in understanding the influence of InsurTech on their existing business model. Based on the findings and the new framework, recommendations for existing insurers are presented. Recommendations for future studies will also be made and the limitations of the study discussed thereafter.

7.2 Research Findings

7.2.1 Synthesis of the Principle Findings

The study successfully undertook exploratory research to answer the research problem set out in chapter one. The study aimed to understand the influence of InsurTech on existing insurance business models and how existing insurers should co-ordinate a response to InsurTech. The key findings of this study can be summarised into four main areas. Firstly, the challenges experienced by existing insurers are also the drivers spurring the growth of InsurTech in the industry (Catlin & Lorenz, 2017; Teece, 2010; Pollari, 2016). Secondly, InsurTech can spur business model innovation in existing insurance business models, with the ability to create and capture more customer value than the current model (Puschmann, 2017; Sosna et al., 2016; Chesbrough, 2010, Hossain, 2016). Thirdly, there are gaps between the existing insurance business model and the model needed to respond to InsurTech. Lastly that insurers need to build organisational capabilities to facilitate the business model innovation that is needed to close the gaps that have been identified in their existing insurance business model such that an adequate response to InsurTech is achieved.

7.2.2 The challenges driving the growth of InsurTech

One of the first objectives of this research was to determine the challenges currently facing existing insurers. The first prominent finding of this research shows that the challenges facing existing insurers are also the driving and evolutionary forces spurring the growth of InsurTech in the insurance industry (Puschmann, 2017). The findings

confirm the growing consensus among academics that these challenges have arisen because of the increasing rate of digitisation of the financial services industry due to the rapid development of new Information Technologies (IT) (Dapp, 2014; Bussmann, 2017; Pollari, 2016). The findings are also consistent with the framework proposed by scholars Lee & Shin (2018) who describe the factors that support a fintech ecosystem within an industry. Moreover, the findings also show that the drivers for InsurTech in the insurance mirror those that drove the insurgence of FinTech in the banking industry (Bussmann, 2017). Consequently, the findings show that these challenges will have a profound influence on the existing insurance business models as they have introduced the scope for innovation into the industry (Catlin & Lorenz,2017; Yan et al., 2018; OECD, 2017).

7.2.3 InsurTech spurring Business Model Innovation

The second prominent finding of this research is the confirmation that InsurTech is likely to influence existing insurance business models by spurring business model innovation or, introduce the risk of being forced out of the market. The findings showed that InsurTech may not only be a threat to the existing insurance business model but also an opportunity to act as a catalyst for innovation (Catlin & Lorenz, 2017). The findings also showed that should existing insurance models fail to embrace digital structural change then the risk becomes existential in nature where InsurTech will represent formidable competition (Dapp, 2014, Puschmann, 2017). Scholars agree the potential of new technologies, like InsurTech, are not lost on existing players in the market but brings the potential to provide tools and methods to address the digital reality facing the financial services industry (Lee & Shin, 2018; Bussmann, 2017). These findings suggest an answer to Chesbrough (2010) who calls for understanding how technological innovation affects business model choice responses.

7.2.4 Business Model Innovation closing the gaps in the existing insurance business model

The third prominent finding of this research is the unanimous view by research participants that there are gaps in the existing insurance business model and those gaps should be closed using business model innovation. These gaps are related to the target market, revenue model and customer value proposition. The findings were like the three basic components proposed by Hossain (2016). Hossain (2016) posited that three basic components of a business model namely; customer value proposition, profit formula and key processes require innovation for incumbents to remain successful within the current business context (Lee & Shin, 2016; Hossain, 2016). The findings also provide evidence from the nature of the gaps that reframing of the existing insurance business model is

required to foresee the emerging challenges and opportunities related to InsurTech, closing the gaps and out performing competitors (Hossain, 2016).

7.2.5 The capabilities needed by existing insurers to facilitate Business Model Innovation

The fourth prominent finding of this research is there are organisational barriers to building capabilities that can facilitate business model innovation. The findings identify the need for leadership buy-in to secure the organisational investment needed for resources towards InsurTech related activities and business model innovation. Organisations need to embrace business model innovation through trial and error experimentation building innovation as a capability while maintaining the current effectiveness of the existing business model (Sosna et al., 2016; Lawson & Samson, 2001; Teece, 2010). The findings support the consensus by scholars who find that business model innovation assists companies in evolving and moving away from the short comings of their earlier business models, for a sustainable and rejuvenated outlook on growth and profits (Teece, 2010, Baden-Fuller &Haefliger, 2010, Sosna et al.,2016, Catlin & Lorenz, 2017).

7.3 A Proposed Framework

This section presents a proposed model describing the influence of InsurTech on the existing insurance business model based on the qualitative insights derived from this study. The framework is limited by the small sample size and non-empirical nature of the data but is useful nonetheless as the model can be used to understand the influence of new technologies in a similar context. The model integrates the themes identified in chapter fix and six of this paper. Based on a more in-depth understanding of the influence of InsurTech on the existing insurance business model, this framework presents a model for the potential for InsurTech to spur business model innovation.

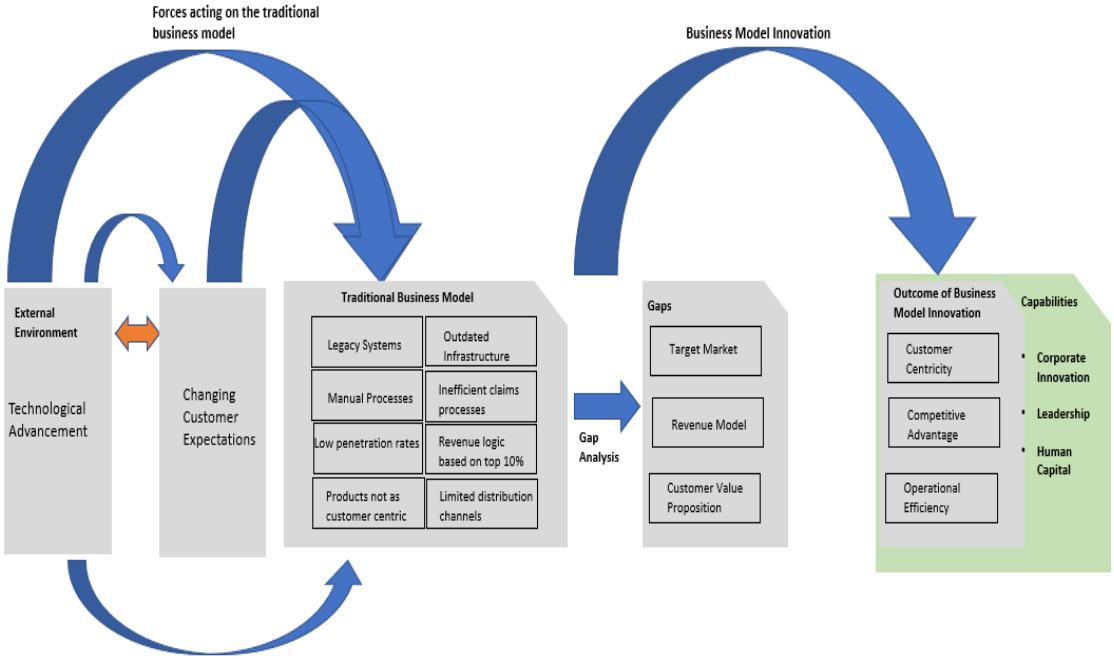

Figure 13:Showing the proposed framework for the influence of InsurTech on the existing insurance business model

7.3.1 Explanation of the model for the Influence of InsurTech on the existing insurance business model

The model explains how technological development in the external environment links to the benefits of business model innovation through gap analysis and capability building. The model shows technological innovation that occurs in the external environment acting as a force that drives change on both the existing business model of the incumbent and consumer expectations. The link between the development of new technologies and consumer expectations are shown as a two-way mechanism as they serve to directly influence each other.

Moving inwards, the model shows the driving forces of change: technological advancement and consumer expectations acting with strong force on the blue print of an incumbent's traditional business model. These strong external forces act on the traditional business model in tandem with each other, to highlight those components of the traditional business model that compromise the incumbent's ability to meet their customers' expectations. The components of the traditional business model that are related to legacy systems and outdated infrastructure are highlighted first. The model assumes that technological influence from the external environment will influence the technological core of the existing firm and show those gaps first.

The forces then identify gaps in the core of the business model such as the business logic behind the revenue model, the target market and the customer value proposition.

Changing consumer expectations and new technologies in the external environment influence the substance of these core components because together they shape the activities of the organisation, influencing product design, services and competencies. The forces then spur business model innovation driving the model to rejuvenate those components that have created gaps in the traditional business model.

Business model innovation transforms the traditional business model to using customer centricity as agent for change that leads to a competitive advantage and operational efficiencies. In order to support business model innovation that is required to weaken the threatening forces of new technologies and changing customer expectations capabilities that nurture corporate innovation are needed such as leadership and human capital.

7.4 Implications for Business

The data collected and findings from research questions one to four demonstrated that while existing insurers are aware of InsurTech, there is a lack of understanding of the positive influence InsurTech can have on the existing insurance business model through business model innovation. This research has highlighted a practical way for existing insures to conceptualise the influence of InsurTech (and other new technologies), on their traditional business models and its ability to spur business model innovation. In addition to the framework above, the research provides a number of insights for business practioners.

- The study identified that existing insurers are aware of technological developments in the insurance space and their ability to be applied in the existing insurance business model. Therefore, leaders in existing insurers need to have the mindset and buy-in for investment into these technologies to unlock new ways of creating and capturing value for both their customers and themselves.
- The challenges currently experienced by existing insurers are drivers propelling the growth of InsurTech in the industry. Managers need to revaluate and analyse the full ecosystem of their traditional insurance business within the context of their business areas to fully understand the origins of these challenges to co-ordinate a response to InsurTech.
- The study identified that InsurTech has the ability to spur business model innovation. Managers need to build the capabilities needed to facilitate business model innovation through human capital and corporate innovation efforts.
- Two responses to InsurTech by existing insurers were identified, 1) InsurTech as a threat which requires existing insurers to build new technologies to compete directly with them 2) collaboration and partnership where existing insurers can

take the view that InsurTech can help evolve the traditional insurance business model. Leadership vision, buy-in and mindsets are needed to drive the evolution of the existing insurance business model in this regard.

- The study showed that customer centricity is missing in the existing insurance business model. Therefore, managers need to understand InsurTech business models and how they are modelled around customer centricity at the core.
- Existing insurers need to revisit their logic around their target market, revenue model and how their customer value propositions are being eroded by InsurTech. Managers need to look at building a relationship with the customer in order to understand their needs, this may mean finding new ways to collaborate with intermediaries.
- The study identified a competitive advantage, customer centricity and operational efficiency as benefits of business model innovation spurred by the movement of InsurTech in the industry. Managers need to be exposed to the environment were trial and error experimentation with new technologies is nurtured within the organisation.
- The study showed that human capital with knowledge and experience in the areas of data science, data analytics and software engineers are needed to leverage the benefits of InsurTechs. Existing insurers should incorporate this into their human resource strategies.
- The study identified the need for corporate innovation to facilitate business model innovation. Leaders and managers should strategize how to include corporate innovation as part of the culture, as the success of business model the study suggests the use of hubs.

7.5 Recommendations for Future Research

The influence of new technologies in the financial services industry has recently gained a significant amount of attention following the revolution of FinTech in the banking industry (Pollari, 2016; Bussmann, 2017). However, little is known about the influence of Fintech on existing business models particularly InsurTech in the insurance industry as it is an emerging phenomenon (Yan et al.,2018). This research project aimed to uncover insights on the on the influence of InsurTech on the existing insurance business model, its ability to spur business model innovation, the gaps in existing insurance business models and the one needed to respond to InsurTech as well as the capabilities that existing insurers need to build to close those gaps.

Recommended areas for future research are presented below:

- There is a need for research to be conducted into what the impact will be on the structure of the insurance industry if the current challenges facing existing insurers are not addressed without business model innovation.
- Research into how InsurTech and existing insurers can integrate their business models for successful collaboration in the future.
- How existing insurance companies can innovate their existing business model while still successfully contributing to revenues and profits, considering InsurTech that is likely to undermine their future effectiveness without business model innovation

7.6 Research Limitations

The qualitative nature of this research means that this study is likely to be inherently subjective and as such is at risk of being influenced by several biases (Sanders and Lewis, 2012). The following aspects were identified as limitations of the study:

- The sample was limited to senior executives, CEOs and senior line managers. The views of individuals at the junior and middle levels of the organisations could have contributed to the study by understanding the topic from their perspective
- The small sample size of limits the generalisability of the results to other contexts
- The researcher was not formally trained in qualitative data collection and interviewing techniques which may have impacted the interpretation of the results and conclusions drawn from the data
- The sample was limited to existing insurers based in Johannesburg, South Africa. On this basis, geographical bias could have influenced the participants responses.
- The researcher works and is involved in the insurance industry, this may have led to certain biases in the interpretation of the interview data collected.

7.7 Conclusion

This research has provided new insights into the influence of InsurTech on the existing insurance business model. Through exploratory, qualitative interviews with ten insurance professionals from both local and multinational insurers rich insights were derived and analysed to add empirical insights to the literature on FinTech, business models and business model innovation. The study found that challenges experienced by existing insurers are also the drivers spurring the growth of InsurTech in the insurance industry. InsurTech has the ability to spur business model innovation enhancing the existing insurance business model through customer centricity, operational efficiency and providing a competitive advantage. There are several gaps in the existing insurance

business model and the business model that is needed to respond. These gaps relate to the target market, revenue model and customer value proposition in the existing insurance business model. The capabilities that existing insurers need to build to close these gaps include human capital focusing on data scientists, data analysts and software engineers. Leadership investment into experimentation and new technologies as well as corporate innovation are other capabilities that should be built. The key points of this study were summarised in a framework that may be useful as a tool for understanding the influence of new technologies on existing business models.

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9 Appendices

Appendix A: Informed Consent Letter

Informed Consent Letter

Dear participant

I am conducting research on the influence of InsurTech on existing insurers business models

Our interview is expected to last about an hour, and will help us understand the following points:

- What are the challenges of the current business model adopted by incumbent insurers?
- What are the gaps between the current business models of incumbent insurers and the business model needed to respond to InsurTech?
- What capabilities do incumbent insurers need to close those gaps that are identified?

Your participation is voluntary, and you can withdraw at any time without penalty. Our interview will be audio recorded, and all data will be kept confidential. All data will be reported without identifiers. This research is in partial fulfilment of the requirements of my Masters in Business Administration (MBA) degree through the Gordon Institute of Business Science (University of Pretoria).

If you have any concerns regarding this research, please contact me or my supervisor. Our details are provided below.

Researcher: Terashni Pillay
Email: terashnip @gmail.com
Telephone: 072 955 5873

Research Supervisor: Andre Vermaak
Email: Andrepv@mweb.co.za
Telephone: 083 308 0235

_____

Signature of participant:

Date: _____

_____

Signature of researcher:

Date: _____

Appendix B: Interview Guide

Name:
Organisation:
Job title:
Date:
Start Time:
End Time:

Thank you for agreeing to participate in my study and meeting with me. I appreciate your time and your input.

Before we continue, may I ask that you complete the consent form? Please remember that your participation in the interview is voluntary and that you may choose to withdraw at any time and without prejudice. In addition, this interview will be recorded. The recording will be used solely for data analysis and to ensure that all your responses are captured. Your identity, or that of your company, will not be included in my report

I am conducting research on the influence of InsurTech on existing insurer business models. The objective is to explore how InsurTech may spur business model innovation for incumbent insurers.

1. How do you define a business model?
2. How would you describe the current business model of the insurance industry?
3. What do you think the challenges are for existing insurance business models in the insurance industry?
4. How do you think InsurTech will solve those challenges?
5. What do you think the drivers are that are spurring technological innovation, like InsurTech, in the insurance industry?
6. Do you think current insurance business models are resilient enough to not respond to InsurTech?

7. What value do you think InsurTech can add to the current insurance business model?
8. What is your opinion on the gap between existing business models in the industry and what is needed to respond InsurTech in the future?
9. What are the top three areas in insurance value chain that you think will be impacted the most by InsurTech? Why?
10. To close the gaps that InsurTech will present, what are the top 3-5 capabilities do you think current insurers will need?

Appendix C: Ethical Clearance Letter

Gordon Institute of Business Science
University of Pretoria

30 July 2018

Pillay Terashni

Dear Terashni

Please be advised that your application for Ethical Clearance has been approved.

You are therefore allowed to continue collecting your data.

Please note that approval is granted based on the methodology and research instruments provided in the application. If there is any deviation change or addition to the research method or tools, a supplementary application for approval must be obtained

We wish you everything of the best for the rest of the project.

Kind Regards

GIBS MBA Research Ethical Clearance Committee

Appendix D: Excel Code Book

Current Insurer- Uses generic technology
Current Insurer- outdated system infrastructure
Current Insurer- Cost focus
Current Insurer- Profitability focus
Ineffective legacy systems
Current Insurer- Low differentiation in the market
Broker driven market
Driver- Costs are driving technological change
Driver- necessity to remain relevant to the consumer
Driver- Price of technology getting cheaper
Driver- Changing consumer preferences
Technology- AI
Driver- Technological advancement
Changing consumer engagement needs with insurers
Changing consumer preferences for insurance products
Product complexity is high in insurance
Increased consumer uptake of technology
Current Insurers- Misalignment with consumer needs
Online Insurers
Technology - internet
Technology - app
Technology - AI
Current Insurer - BM not resilient
InsurTech is a threat to current Insurers if they don't innovate
InsurTech meeting consumer needs
InsurTech adds value at certain parts of the value chain
InsurTech will address the gap with current insurers in pricing
Gap - Product Quality
Gap - Insurance plan wording
Technology can’t work in the current business model as a standalone, it needs to be incorporated into the curre
Technology- better understanding of the insureds risk
Technology will improve the current insurance business model and do it better
Technology will improve introduce cost savings
Technology will require a less labour-intensive operation
There are high start-up costs associated with implementing technology in current insurance business models
InsurTech coexist with current insurers
Current Insurer- Outdated product delivery to consumers
InsurTech has short comings
InsurTech can’t replace the human interaction needed in some parts of the value chain of insurance
InsurTech will streamline business flow and operations
Current Insurer Challenge - Claims handling
InsurTech will simplify claims process
InsurTech will service clients faster
InsurTech allow current insurers to adapt to changing environment faster
InsurTech will increase predictive risk capabilities

InsurTech will assist in determining of loss events
InsurTech will assist in understanding new risks - cyber
Current Insurer- Traditional Business Model
Current Insurer- Claims process is a pain point
Current Insurer- Claims process is inefficient
Technology vs human factor
Technology makes insurance easier
Current Insurers- Left behind if they don't start to innovate and embrace technology
Can use technology to improve client journey
InsurTech to help in risk modelling
Current Insurer- Low levels of innovation
Aware of a large amount of technological development in the insurance space
Competitive insurance market
Driver- Insurance demographic is changing (Younger clients, more tech savvy)
InsurTech won't eliminate Insurers
InsurTech offers speed
Competition is driving business model innovation for current insurers through technology
InsurTech impact-will help add value to the current business model
InsurTech impact - Better customer delivery
Current Insurer- Profit focus
Trend-Current Insurers starting to change in response to the environment
Current Insurer- Long internal processes
Current Insurer- Slow operations
Business model innovation starting to happen in changing environment
Insures will be left behind if they don't change
In seeing what tech to implement need to review your market
Anticipating what the market wants
Driver- Technology
InsurTech already changing the landscape
InsurTech influencing client risk behaviour
Technology-IOT
InsurTech- Collect granular information
InsurTech- Understand clients risk profiles
InsurTech- Insight into client risk behaviour and patterns
Capability- Leadership Mindset
Capability- Leadership Buy in
Organisational inertia to technological change
Capability- educating people
InsurTech should have a use case and not blindly applied
InsurTech- Disruptive technology
Innovation- Policy handling from inception to close
Innovation- Claims handling from inception to close
Capability- Organisational learning to use new technologies
InsurTech- Assess your risk better
Current Insurer- Claims focus
Current Insurers- Growth focus in current product lines and services

Current Insurers- Not forward looking enough
Current Insurers- Complacent and no incentive to innovate
Current Insurer-Low levels of change
Driver- understanding client risk profiles
Driver- Tailored pricing through more information collected
Technology- Better client selection
Technology- Improve profitability through data modelling
Trial and error in choosing technologies
Selection of better risks
Current Insurers- Inflexible because of legacy systems
InsurTech impact- Data aggregation becoming powerful for insurers
Competition for insurers are coming from outside the financial services industry
Questions the ability for current insurers to adapt fast enough
Unsure if InsurTech will solve current insurer challenges
Firms with InsurTech that allow data aggregation threat for current insurers
Current insurers have experience of InsurTechs and outside industry competitors
Technology can't replace the human relationship of the broker
Insurance business model is resilient but not infallible
Economy is affecting consumer affordability
important to price products right for current insurers in current economic climate
Driver-Younger clients
InsurTech better pricing
Consumers want better pricing
Don't dismiss current insurers data analysis capabilities
Competition in the future for insurers will be whose technology does it best
Technology- Machine Learning
Human resources- Data scientists, programmers, Data analysts
Current Insurer- Outdated business model
Current Insurers- take a long time evolve and innovate
InsurTech can reduce gaps between products and client needs
Broker fear InsurTech will replace them
Many people still don't understand InsurTech
Driver- Competition in insurance market (Global, Local, from other industries)
Consumer brand relationships are changing
Driver- Changing business environment spurring InsurTech
Technology enables effiency
Insurance companies are investing in technology
Insurance market penetration is still low
Large underserved market in insurance
Current Insurers- Traditional sales channels
InsurTech offers new sales channels
InsurTech companies are using different sales channels
InsurTech- Peer2peer Insurance
Shared Risk Economy
Crowd Funding
Consumers are open to new forms of insurance

InsurTech with new business models are gaining traction
Facebook
Technology allows for insurance to be distributed across new channels
InsurTech are new entrants to the insurance market
Insurers need to understand the types of technology that's out there
Current Insurers- Lack the skills that allow them to take the advantage of the technology out there
Lack of human skilled resources are an inhibitor to implementing InsurTech
Skills shortage in the country
Gap- Leadership Funding
Capability- Budget monetary resources
InsurTech impact- Risk Management
InsurTech impact- Underwriting
InsurTech impact- Claims
Current Insurers- Manual processes
create value
Challenge- Current insurance model excludes people from the market
Challenge- Claims handling creates distrust
Challenge- Insurers are not pricing right
Customer centricity
InsurTech- Will experience regulatory issues
Regulation
InsurTech is agile and flexible
InsurTech won't disrupt the entire insurance business model
Current Insurer- Regulatory challenges
Current Insurers are innovating
Technology is disrupting the insurance industry
Current Insurers- Stable operations, brand equity and trust
InsurTech will make insurance cheaper
InsurTech digital experience
InsurTech will collaborate with current insurers
InsurTech impact- New sources of data
Challenge- current insurers don't innovate fast enough
Insurers are not learning fast enough
Customers have more access to information and technology
Current Insurers- Setting up incubators Insurers are creating spaces where they are investing in InsurTech
InsurTech impact- faster, simpler, operationally efficient
InsurTech are expanding the market
InsurTech are changing the business model by looking at other underserved segments
Sandbox regulation
InsurTech have high barriers to entry
Insurers will acquire InsurTech
Capability- Innovative people
InsurTech impact- Social impact
InsurTech impact- Changes the insurance value proposition
Value creation
Value delivery

Current Insurer- Waste in the Business model
InsurTech Impact- Fraud
Capabilities: software, unique systems and infrastructure
InsurTech Impact- Brokerage business