Business Model Regulatory Impact on Operational Efficiency and Treating Customers Fairly

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

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ABSTRACT

The study focused on determining the impact of regulations on the business model of smaller insurance companies. The study was conducted through the use of a survey distributed to Under-writing management agencies (UMAs) within local insurance companies. Participants included upper-, mid-, and lower-management employees, as well as support staff to obtain a well-rounded viewpoint of the company. Participants were of both genders and of all age groups in order to provide equal chances of selection for study participation.

The survey contained quantitative data, answerable through a Likert Scale. The questions measured the effect regulations have had on operational efficiency, treating customers fairly (TCF) initiative, to determine if business model changes were or would be required to accommodate regulatory changes.

The study concluded that UMAs have not achieved high rates of operational efficiency as a result of regulatory changes and the TCF initiative. Regulations were shown through the study to have an impact on business models and how customers are treated. Although these were the overall conclusions, the respondents to the study confirmed that although overall results show that operational efficiency has not improved and regulations have changed how customers are treated. In addition, the study found that as a result of regulatory changes, changes such as the implementation technology advancements to meet requirements have had beneficial effects on the business.

Keywords:
Business model, operational efficiency, treating customers fairly, regulation, insurance
DECLARATION

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

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Ismail Ebrahim Ismail              Date: 09 November 2015
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CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM

This chapter opens the study, providing basic information regarding the topic. This involves an introduction to the broad topic, which narrows in scope to the specific topic. Following this, the problem statement is established. Next, the nature of the study is discussed. This information leads to the research questions and hypotheses. Following this, the research objectives are identified. Therefore, the purpose of the study can be defined. This will lead to the theoretical basis for conducting the study. Following this information, operational definitions are provided, followed by assumptions, limitations, scope and delimitations, and the significance of the study. The chapter concludes with a short summary.

1.1) Introduction

Business model regulations are changing and becoming more complex. The potential fines imposed for non-compliance can be significant forcing companies to adapt business models to comply, mainly through technology and innovation advances. Regulatory changes have been made in order to improve the “safety and soundness of the global financial system through a range of regulatory changes aimed primarily at large banks” (EY Global, 2015). However, there are other companies within the financial services industry that have been affected by business model regulations, such as within the insurance industry. For example, the insurance industry is governed by insurance regulatory law, which has been developed through individual states and statutory law (Van III, 2011). As a result, the business models utilised by the insurance industry are governed by insurance regulatory laws. Regulations inhibit operational efficiency through inconsistency. That is, business models must be aligned with the applicable regulations. For instance, manufactured capital regulations can inhibit operational efficiency if the facilities, equipment, and other infrastructural components are not productive (lirc & International Integrated Reporting Council, 2013).

In 2010, the Federal Insurance Office was established, but was not designed to take over state regulations. Rather, the purpose was to implement new requirements within the insurance industry (PWC, 2010). The office analyses different aspects of insurance regulation, such as “systemic risk, capital standards, consumer protection, national uniformity of insurance regulation, regulation of companies and affiliates on a consolidated basis, international coordination of insurance regulation, international coordination of insurance regulation, costs and benefits of federal regulation of insurance, feasibility of regulating only certain lines of business at the federal level,
regulatory arbitrage, impact of regulatory changes in foreign jurisdictions on potential federal regulation, and federal resolution authority” (PWC, 2010, p. 2). Complying with this new requirement may be time consuming and may hinder productivity and profitability.

1.2) Problem Statement
The problem of business model regulation was selected in order to improve existing models and achieve enhanced operational efficiency. This is crucial to creating profitability for individual companies within the financial services industry. Since operational efficiency typically revolves around cost reductions within this industry, it is important to see how business model regulation affects the actions needed to create operational efficiency within the company. An analysis of the of the problem statement identified the core overlap between subject matters, business model, regulation and operational efficiency (as demonstrated in Figure 1).

Figure 1: Schematic Representation of the Overlap between the Core Subject Matter

1.3) Nature of Study
This study was conducted through a quantitative descriptive research design and correlational research design. This means that the study was based on the description of the results, excluding any influence from the researcher. However, this type of study cannot definitively prove or disprove a hypothesis because the study is correlational in nature. That is, this specific study deviated from the traditional descriptive research method in that it does prove or disprove the hypotheses. As a result, through the combination of the methods used (descriptive and correlative), the researcher was able to address different aspects of the study. This study, in particular, aimed to determine the strength of the causation of the dependent variables by the independent variable.
1.4) Research Questions and Hypotheses

The research questions in this study were causal and included:

1. To what extent have regulations affected operational efficiency?
2. To what extent have regulations affected business models?
3. To what extent have regulations affected how customers are treated?

Based on this information, the researcher hypothesised:

1. According to current employees, underwriting management agencies have achieved high rates of operational efficiency.
2. According to current employees, regulations have affected business models and how customers are treated.

The null hypotheses were:

1. According to current employees, underwriting management agencies have not achieved high rates of operational efficiency.
2. According to current employees, regulations have not affected business models and how customers are treated.

1.5) Research Objectives

The problem is relevant in two respects. For instance, companies must achieve operational efficiency to remain profitable, which is a major goal for many companies. At the same time, the company must be sure that the business model meets the needs of its customers, as well as follows the regulations set forth by the government and other regulatory agencies. Therefore, regulations are designed to meet a variety of needs, including international challenges that exist in the global marketplace (De Cagna, 2010). Furthermore, regulations assist in establishing stability and reducing risk, yet are known to affect operational efficiency (Chortareas, Girardone, & Ventouri, 2012a; Jalilian, Kirkpatrick, & Parker, 2007; Zhao, Casu, & Ferrari, 2010).

1.6) Purpose of the Study

Business models can be defined as “a statement, a description, a representation, an architecture, a conceptual tool or model, a structural template, a method, a framework, a pattern, and a set” (C. Zott, Amit, & Massa, 2011, p. 1022). At the same time, there have been controversies relating to regulations, with the AIG case being one example. In this case, “the company was enthusiastic about the move since the increased regulatory scrutiny helped to restore trust in a brand that had been utterly debased” (The Economist, 2014). Yet, some companies, such as MetLife, are not as enthusiastic
about the increased regulations. It has also been found that “insurance has maintained a convenient conceit about the ethics that underpin the industry believing that it was the ‘nasty bankers’ who had been indulging in dodgy and near-criminal acts. As the previous year has shown us, insurance is by no means immune to poor ethical practices and the dark paths of finance that greed leads some executives down” (Blanc, 2014).

The study is needed from both a business and an academic standpoint. Therefore, this study will determine how regulation changes have affected business models in the insurance industry, how customers are treated fairly within the insurance industry, and how operational efficiency is achieved despite regulation changes within the insurance industry.

1.7) Theoretical Base
It has been hypothesised that regulations have been excessive and badly written (The Economist, 2013). Therefore, in many ways, regulation has not been effective. It is concluded that when the law, including regulations, and market do not meet their obligations, culture and ethics can influence the results (Awrey, Blair, & Kershaw, 2013). As a result, it can be concluded that business model regulations must be culturally acceptable and ethical, simultaneously. Thus, innovation is crucial for economic growth, competition, profitability, and long-term continuity.

1.8) Operational Definitions
Based on the research questions, the units of analysis are operational efficiency, how customers are treated, and regulations. The independent variable is the one that causes the reaction. Thus, the focal point was to determine whether or not regulations cause the dependent variables. This allowed the research questions to be answered most effectively.

1.9) Assumptions
It is assumed that participants responded honestly and completely. It is assumed that the references obtained are accurate and up-to-date. It is assumed that the information used in determining the results of the study are accurate. It is also assumed that the methodology is the most effective one possible in respect to the research problem.
1.10) Limitations
The researcher has no control over the participants’ responses. In addition, the researcher has no control over the number of responses obtained. The researcher has no control over how participants interpret the questions provided on the questionnaire. Therefore, the researcher has no control over the perception of the participants to the questions or how they choose to respond. Finally, since the study involves financial services particularly insurance, it is not possible to tangibly measure where costs have increased.

1.11) Scope and Delimitations
Businesses will benefit from the study because they will be able to achieve operational efficiency. Through the information obtained from the study, businesses will have the opportunity to adjust their business models to meet regulatory expectations and customer expectations. The study is theoretically needed because it will help future operations. This means that the study will provide the opportunity for businesses to modify existing models to ones that will most effectively increase operational efficiency, yet follow the existing regulations.

1.12) Significance of the Study
The South African short-term insurance industry has been inundated with many competitors attempting to obtain a space for which there is limited market share. Faced with an increase of invasive legislature, the entire industry is devoting a substantial amount of time in advancing this new regulatory regime. Amidst the competitive onslaught and regulatory arbitrage, the underwriting management agencies (hereafter referred to as UMA’s) are continuously looking for new ways to grow their businesses against the backdrop of a limited distribution channel and an expensive business model.

Thus, business models have different contexts. Therefore, every company operates according to some logic, even if the logic is not described as a business model, leading to immense innovation. This suggests that successful business models that meet the expectations of financial innovation include four components: “customer value proposition, profit formula, key resources, and key processes.” As a result, these are the “building blocks” of a business (Breiby & Wanberg, 2011; Casadesus-Masanell & Ricart, 2010; Gejler, 2013; Ricart & Casadesus-Masanell, 2011; Sanchez & Ricart, 2010b; Zott et al., 2011).
1.13) Research Approach and Overview

The research approach began with a review of business regulations, business models, operational efficiency, and customer treatment. This was done in order to ascertain the ways that operational efficiency is achieved and how regulations affect business models and how customers are treated. This allowed the study to be conducted in order to determine how underwriting managers were affected by business regulations and the impact of resultant regulations on operational efficiency and how customers are treated. This allowed the data to be analysed and explored effectively. This can be explained in a more comprehensive way through Figure 2, below.
Figure 2: Research Approach and Chapters in the Study

1.14) **Summary and Transition**
It has been established that business model regulations are changing as technology and innovation advances, emphasising the need for regulatory changes. These regulatory changes have affected the insurance industry as well. As a result, the
business models utilised by the insurance industry are governed by insurance regulatory laws. Complying with this new requirement may be time consuming and may hinder productivity and profitability. Regulation increases costs and impacts competition, causing efficiency to decrease. However, it is also known that business models develop the strategy and logic of the firm, such as operations and value creation for stakeholders (Baden-Fuller, MacMillan, Demil, & Lecocq, 2010). Thus, innovation is crucial for economic growth, competition, profitability, and long-term continuity.

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With this information, the literature review is introduced, which is important because it addresses operational efficiency, TCF, regulations, and business models in greater detail.
CHAPTER 2: LITERATURE REVIEW

2.1) Introduction
The most effective business model includes partners, activities, resources, value proposition, customer relationships, supplier and distribution channels, and customer segments. As is well known, customers must be treated fairly in order to create customer loyalty. However, business models are also affected by regulations. Significantly, global banks have little choice but to conform to current economic conditions and regulation changes (EY Global, 2015). These regulation changes can affect how customers are treated as well as operational efficiency. Regulation changes affect how customers are treated through providing new standards that affect customer/business relationships. In most cases, these standards are beneficial to the customer and serve to protect their rights. As a result, the business model is typically altered to adapt to the new regulations, including new ways to analyse company efficiency, a holistic emphasis on how business is conducted, is conceptualised through the conduction of business activities; and provides an explanation regarding how value is created and captured (Zott et al., 2011).

It is noted that regulatory changes have been made in the banking industry to improve the safety and soundness of the global financial system (EY Global, 2015). However, the results of these changes have not been made apparent in terms of regulation evolution. Regardless of whether or not a company is for-profit or not-for-profit, it needs to be operationally efficient. Therefore, regulations can inhibit operational efficiency, which can reduce profit or hinder the achievement of established business goals. For example, a stringent reason for the implementation of regulation changes was due to the failure of financial institutions to utilise policies that would stabilise the financial system (Levine, 2012). Since the global financial system was destabilised through the use of these policies, profit was reduced because debts could not be repaid, resulting in increased defaults. Furthermore, risk increased, particularly in terms of the provision of credit. When risk increases, there is an increased difficulty in meeting established business goals.

As the financial services industry changes, so do the regulations. In a study conducted by Littauer (2011), within the financial services industry, operational efficiency can be associated with cost reductions. This requires companies to focus on their core strengths (Littauer, 2011). The same is true for the insurance part of the industry. If companies do not focus on their core strengths, operational efficiency will decrease.
Regulatory changes can affect operational efficiency. Therefore, it is important to determine how efficient companies are in relation to current regulatory requirements. This requires the understanding of the new business rules in place that form the ability of companies to compete within the global marketplace, leading to business model modification for all companies. The model applies to numerous aspects of the business, such as business processes, use of human capital, customers, distribution channels, strategies, infrastructure, purchasing, organisational structures, innovation, and R&D (Blakemore, 2006; George & Bock, 2011).

The financial market has been influenced by financial deregulation and re-regulation. It is noted that these two processes have been occurring in developed and developing countries. The goal of de-regulation has been to “lower firms’ regulatory costs and foster competition” (Zhao et al., 2010, p. 246). This has been commonly referred to as positive competition, which has led to monopolisation. This suggests that de-regulation and the competition that ensues should “translate into incentives for managers to improve efficiency and performance” (Zhao et al., 2010, p. 246). In contrast, the goal of re-regulation has been to “foster stability and minimize excessive risk taking” (Zhao et al., 2010, p. 246). Re-regulation increases costs and impacts competition, causing efficiency to decrease. There have been controversies regarding “the relevance of corporate governance” in relation to regulation efforts (Zhao et al., 2010, p. 246).

In a study conducted by Jalilian, Kirkpatrick, and Parker (2007), it was found that regulation may interfere with operational efficiency (Jalilian et al., 2007). That is, whenever regulation is implemented business efficiency is affected. Jillian et al. (2007) further highlight that regulatory burden ultimately affects the economic performance of the underlying entity (Jalilian et al., 2007). Chortareas, Girardone, and Ventouri (2012) provide further evidence that regulatory policies such as private sector monitoring and restricting bank activities can result in higher inefficiency levels.

Microeconomic theory suggests that “deregulation should positively affect the efficiency and productivity of an industry as it reduces the regulatory cost imposed on market participants. In addition, increased competition fostered by deregulation should induce firms to minimize costs to maintain market shares and profitability” (Zhao et al., 2010, p. 247). However, this is only theory. In reality, there have been no definitive studies or evidence that shows that “regulatory changes in the late 1990s have affected the structure, conduct and performance relationship in the financial sector” (Zhao et al.,
As such, it was expected that these changes would increase incentives for efficiency.

As such, the literature review is divided into three sections:

1) Business model regulation,
2) Treating customers fairly, and
3) Operational efficiency.

These divisions are important because they help determine how effective a company is at meeting both customer expectations and internal objectives.

2.2) Business Models

Business model has many different definitions. For instance, at the base level, a business model may be:

- A reflection of a firm’s strategic choice (Shafer, Smith, & Linder, 2005),
- Is a conceptualization of transactional links between a firm and exchange partners (Zott & Amit, 2008) and governance of transactions (Amit & Zott, 2001) designed to create value (Chesbrough, 2007).
- Unification of the finer aspects of strategy (Hedman & Kalling, 2003),
- A definition of the organisation’s logic (Linder & Cantrell, 2000) and mind-sets (Linder & Cantrell, 2007).
- Inclusive of a contingency model (Mansfield & Fourie, 2004) associated with an interrelated set of decision variables (Morris, Schindehutte, & Allen, 2005)
- Along a value constellation (Schweizer, 2005) to identify the “who, what, when, why, how, and how much” elements (Mitchell & Coles, 2003, p. 16).

However, the term ‘business model’ is an old concept. Most of the time, it is undefined. Despite this, interest in business models has grown during the past decade, which may be explained by the “impact of globalization, deregulation, and advances in Information and Communication Technologies (ICTs)” (Sanchez & Ricart, 2010b, p. 2) Thus, it is argued by many scholars and practitioners that current and future competitiveness can be explained by innovations and structural changes to business models (IBM Global Business Service, 2008; Sanchez & Ricart, 2010b).
2.2.1) Social Requirement of Business Models
According to Awrey, Blair, and Kershaw (2013), the social costs of market failure cannot be effectively contained through conventional approaches. Therefore, it is concluded that when the law, including regulations, and market do not meet their obligations, culture and ethics can influence the results. In fact, it may be possible to utilise the power of law and markets in order to develop a space within which culture and ethics (or through a combination of culture and ethics) “can play a meaningful role in constraining socially undesirable behaviour within the financial services industry” (Awrey et al., 2013, p. 1). As a result, it can be concluded that business model regulations must be culturally acceptable and ethical, simultaneously. Studies also show that further research is needed to determine profitability can be achieved while generating social value when utilising business models in low-income markets (Hart & Prahalad, 2008; Sanchez & Ricart, 2010b). However, it is also known that business models develop the strategy and logic of the firm, such as operations and value creation for stakeholders (Baden-Fuller & Morgan, 2010).

2.2.2) Innovation and Technology
This can be further amplified through the consideration of the Islamic banking system. For instance, if the Islamic banking system is compared to conventional banking system, few differences are found in business orientations. However, it is noted that while the Islamic banking system is least cost effective, it has “higher intermediation ratio, higher asset quality and are better capitalized” (Beck, Demirgüç-Kunt, & Merrouche, 2013, p. 433). It is noted that “conventional insurance involves the elements of uncertainty, gambling, and interest, all of which are unacceptable under Islamic law. There existed anxiety among Muslims regarding the inconsistency of conventional banking and insurance in compliance with Islamic laws,” resulting in the establishment of the takaful market (Swartz & Coetz, 2010, p. 33). However, there were also concerns that the market only catered to Muslims. In reality, the market includes non-Muslim clients. Despite this inclusion, the misconception stands and functions primarily within the Muslim world, which utilises the same cultural beliefs across all citizens. As a result, stock performance of Islamic banks is better. The difference in functioning (Islamic banking system versus Western banking system) has developed due to concerns related to the functioning of Western banks after the global financial crisis. Thus, there are numerous advantages of Sharia-compliant financial products. These include “the mismatch of short-term, on-sight demandable deposit contracts with long-term uncertain loan contracts is mitigated with equity and risk-sharing elements” and “very attractive for those that require financial services that align
with religious beliefs, causing an increase in importance in global banking assets” (Beck et al., 2013, p. 433). Despite the benefits of Islamic banking, it is further noted that business models focus on a variety of innovations, not just technology.

Chesbrough (2007) opines that a strong business model is more beneficial than technology or new ideas because business models are based on value creation and value capture (Chesbrough, 2007). Bos-Brouwers (2010) further emphasised that “sustainable innovation has become the focal point to deliver evidence for the commitments of companies to the triple p bottom line” (Bos-Brouwers, 2010, p. 418). Thus, innovation is crucial for economic growth, competition, profitability, and long-term continuity. In addition, Bos-Brouwers (2010) emulated, “sustainable innovation can be defined as the renewal or improvement of products, services and process that not only delivers an improved economic performance, but also an enhanced environmental and social performance, in both short and long term. Its long-term focus, integrated value creation and transformative nature set sustainable innovations apart from conventional innovation” (p. 431). Further, corporate sustainability is important for improving eco-efficiency and increasing value creation. Therefore, many companies have “formulated sustainable innovation goals, such as targets for cost reduction, energy use and innovative output” (Bos-Brouwers, 2010, p. 428).

2.2.3) Business Model Frameworks and Functions

Overall, business models are designed to help interested parties understand how a company operates. Business models are not only considered in context, but are considered as conceptual frameworks. In fact, conceptually, a business model is designed to describe parts of a business and the operation processes and relationships between them (Chesbrough, 2007). Ultimately, this leads to the analysis of the logic being utilised by the business for value creation, both for customers and for stakeholders. However, this is done through different functions. The following table (Table 1) shows the functions of business models.

<table>
<thead>
<tr>
<th>Function 1</th>
<th>Articulate the value proposition, that is, the value created for users by the offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function 2</td>
<td>Identify a market segment, that is, the users to whom the offering is useful and for what purpose</td>
</tr>
<tr>
<td>Function 3</td>
<td>Define the structure of the value chain required by the firm to create and</td>
</tr>
</tbody>
</table>

Table 1: Functions and Purposes of Business Models
| Function 4 | Specify the revenue generation mechanism(s) for the firm, and estimate the cost structure and profit potential of producing the offering, given the value proposition and value chain structure chosen |
| Function 5 | Describe the position of the firm within the value network (also referred to as an ecosystem) linking suppliers and customers, including identification of potential complementors and competitors |
| Function 6 | Formulate the competitive strategy by which the innovating firm will gain and hold advantage over rivals |

Source: Chesbrough (2007, p. 13)

Based on these functions, business models are based on different types of frameworks.

1) **Framework 1** – Involves an undifferentiated business model. This means that there is no distinct business model utilised within the company. Significantly, this type of company “competes on price and availability, and serves customers who buy on those criteria” (Chesbrough, 2007, p. 13).

2) **Framework 2** – Involves some differentiation in the business model. This business model allows participating companies to target specific customers. However, companies within this classification “may lack the resources and staying power to invest in the supporting innovations to sustain its differentiated position” (Chesbrough, 2007, p. 14).

3) **Framework 3** – Segmented business model. The third type of business model is segmented. Within this model, it is possible to compete in different segments, simultaneously. This results in serving more of the market, causing more profit to be extracted from the market. In fact, different niches can be addressed in this way. For instance, price sensitivity dictates volume bases for high volume, low cost production. In addressing individual niches, the distribution channel presence is stronger. This causes the business model to be more distinctive and profitable, further creating
product and technology roadmaps designed to assist the company in meeting future goals (Chesbrough, 2007).

4) Framework 4 – The business model is externally aware. In other words, the companies participating in this model open themselves to different external ideas and technologies aimed at improving the business. As a result, there are more resources available to these companies (Chesbrough, 2007).

5) Framework 5 – Involves the integration of innovation and the business model into one process. This means that the business model has a key integrative role within the company. For instance, suppliers and customers are able to access the company’s innovation process. Therefore, suppliers and customers are able to provide roadmaps to the company, allowing the company to meet the needs of its customers more effectively (Chesbrough, 2007).

6) Framework 6 - the company and suppliers to work together and become partners. In this case, there is integration of the business models of suppliers into the company’s planning process. This allows the company to integrate “its business model into the business model of its key customers” (Chesbrough, 2007, p. 15).

Finally, the integration of business models and the establishment of a value chain are caused by companies being able to establish an innovation platform of technology. As a result, other companies are invited to invest resources, which further increases the value of the platform, yet does not require additional investment from the platform-maker (Chesbrough, 2007). It is also noted that many business models are based on different theories, including the “industrial organization theory, the resource-based view, dynamic capabilities, and game theory” (Casadesus-Masanell & Ricart, 2010, p. 195). Importantly, it is found that “advances in ICT and the demands of socially motivated enterprises constitute important sources of recent business model innovations” (Casadesus-Masanell & Ricart, 2010, p. 195).

Despite this, business models have different contexts. In Business Model Generation, Osterwalder and Pigneur (2010) argue that a business model has nine separate dimensions: value propositions, key activities, partner network, key resources, cost structure, client relationships, client segments, distribution segments and revenue flows (Osterwalder, Pigneur, Smith, & Movement, 2010). It must be further mentioned that
every company operates according to some logic, even if the logic is not described as a business model. This has led to financial innovation within the real estate industry (Gejler, 2013). Gejler (2013) noted that successful business models that meet the expectations of financial innovation included four components: customer value proposition, profit formula, key resources, and key processes. As a result, these are the “building blocks” of a business (Gejler, 2013). Since the real estate industry is closely related to the banking and insurance industry, it is likely that similar models would be effective.

When considering different theories, such as “virtual markets, Schumpeterian innovation, value chain analysis, the resource-based view of the firm, dynamic capabilities, transaction cost economics and strategic networks” (Casadesus-Masanell & Ricart, 2010, p. 197), it is obvious that each individual element does contribute to business models (Amit & Zott, 2001; Sanchez & Ricart, 2010). However, no one element is able to determine the exact method of creating an effective business model. It is agreed by most; however, that value creation is, perhaps, the most important driver for the development of the business model. According to a number of studies (e.g., Amit & Zott, 2001; Sanchez & Ricart, 2010b) “the business model depicts the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities” (Casadesus-Masanell & Ricart, 2010, p. 197). Through this explanation, different business processes are considered, including the exchange of goods or information and the necessary resources and capabilities to conduct the exchange, the different parties within the exchange, how the parties are linked together (such as employee and client), business operation processes and how the parties interact, and information inflows and outflows (Amit & Zott, 2001; Casadesus-Masanell & Ricart, 2010). Therefore, it can be assumed that business models encompass all different parts of the company, allowing it to operate in one functional process. For instance, goods and resources are under the control of the company, distributor, or suppliers. These three different groups have to work together within the business model to provide value creation for the stakeholders. It is commonly believed that through the creation of business models, different elements must be considered, such as the architecture of the company and the sources of value creation (Amit & Zott, 2001; Casadesus-Masanell & Ricart, 2010).

It is believed that technological innovations are crucial to the business model and allows the company to create value in this way (Chesbrough & Rosenbloom, 2002; Luoma, 2014). However, it is also found that technological innovations are not enough
to help the company succeed. This requires that innovation “be translated to a value proposition and other functions of a business model” (Luoma, 2014, p. 18). Based on this information, a business model must first “articulate the value proposition” (Chesbrough & Rosenbloom, 2002; Luoma, 2014). This proves that the company can bring value to customers based on technological innovations. Second, it is necessary that the business model must “identify a market segment and specify the revenue generation mechanism(s) for the firm” (Chesbrough & Rosenbloom, 2002; Luoma, 2014). Third, it is required that the value chain is structured and defined adequately within the company. This is done in order to provide for the creation and distribution of the value to customers. As a result, it is possible to “determine the complementary assets needed to support the firm’s position in this chain” (Chesbrough & Rosenbloom, 2002; Luoma, 2014). Fourth, the company will be able to determine the financial resources needed to provide the value. For instance, this includes the costs of production, manufacturing, and distribution. Fifth, the company must provide links between suppliers and customers, which can define “the position of the firm within the value network” (Chesbrough & Rosenbloom, 2002; Luoma, 2014). Finally, the functions of the business model require that the competitive strategy be developed, showing how competitive advantage will be obtained (Chesbrough & Rosenbloom, 2002; Luoma, 2014).

It is also discovered that it is important to understand “the existing business model as a starting point of business model development” in order to develop ways to establish the company (Johnson, Christensen, & Kagermann, 2008; Luoma, 2014). The goal of this type of model involves the resolution of a problem and the ability to meet the needs of the customer. In this case, “customer value proposition refers to the value creation, whereas profit formula, key resources and key processes define the value delivery” (Luoma, 2014, p. 18). Thus, according to this model, “(1) customer value proposition includes the target customer, job to be done and offering that satisfies the job to be done. (2) Profit formula defines how the company creates value for itself. It is the blueprint of the financial aspects of the business model, including revenue model, cost structure, margin model and resource velocity. (3) Key resources include resources required to deliver the customer value proposition, such as people, technology, equipment, channels and partnerships. Finally, (4) key processes together with key resources define how the value is delivered. They include processes as well as rules, metrics and norms” (Luoma, 2014, p. 18).
Since it is possible to link value proposition and market segment, value creation is developed. It is possible to link revenue generation, customer segment identification, and financial representation to create value capture. Finally, it is possible to link the definition of the value chain with the “position in the value network to define the value delivery, forming the operational model of a company” (Luoma, 2014, p. 20).

There are further similarities between the functions developed by Chesbrough and Rosenbloom (2002) and Osterwalder (2004). In fact, the difference is the addition of competitive strategy (Chesbrough & Rosenbloom, 2002; Osterwalder, 2004). In these two models, value proposition and customer segment are related. However, Osterwalder (2004) considers revenue generation to be independent from customer segment, rather defining the financial pillar (Osterwalder, 2004). Thus, revenue streams and cost structure are grouped together to develop profit. In addition, the value chain function is defined within the company, not the partners (Chesbrough & Rosenbloom, 2002). This provides the provision for the infrastructure elements described through value delivery (Luoma, 2014; Osterwalder, 2004). Thus, categorisation of the elements can occur in different ways and no model is wrong (Chesbrough & Rosenbloom, 2002; Osterwalder, 2004). Furthermore, each model can be seen as developing the other and enhancing the capabilities of existing models. In fact, business model frameworks are often considered to be an example of a promising business model mapping concept (Chesbrough, 2010; Osterwalder, 2004).

It is noted that the business environment refers to both external and internal components. While the “external business environment assesses the market and competitive landscape, including potential customers and their preferences as well as competition and other external factors, the internal environment takes into account the environment inside the company where the business model takes its place” (Luoma, 2014, p. 88). The business environment is condensed into the concepts of strategy, organisational structure, and organisational culture. Thus, strategy is based on the external environment, as well as the company’s position, “serving as a link between the external and internal business environments” (Luoma, 2014, p. 88). The goal of this link is to show the strategy of the company, as well as the application of the business model, allowing the direction of the business to be developed. Thus, the business model has an imperative role in outlining what the business is anticipated to achieve. In contrast, “organizational structure and culture are important in addressing the internal environment of the company and its personnel, affecting the applicability business model in the organization” (Luoma, 2014, p. 89).
Within a contextual business model framework, value proposition is seen as the foundation that is assessed after considering the business landscape, especially strategic issues (Luoma, 2014). The core elements required to achieve the value proposition are customer segments, customer relationships, channels, and key partners (Casadesus-Masanell & Ricart, 2010; Luoma, 2014; Osterwalder, 2004; Osterwalder et al., 2010). These components are regarded as essential for value creation. Finally, according to Luoma (2014), “revenue streams and cost structure elements form the bottom line, concretizing the monetary results of the business model” (Luoma, 2014, p. 89).

The key resources and activities relate to other elements of the business model. This allows the core business activities to be developed. Thus, the business model shows the core logic of the business. The business model framework simplifies different business models depending on the context in which it operates. Casadesus-Masanell and Ricart (2010) opine that a business model is a reflection of the firms strategy, whereas, according to Louma (2014), “the notion of strategy and business model of being different level tools is still supported” (p. 90). In study performed by Luoma (2014), “the additions of strategy and organizational structure and culture are not part of the business model per se but important parts of the context where the business model is to be applied. Finally, the contextual business model framework is aimed to promote understanding of the interrelatedness of these concepts and the fact that a business model cannot be designed without acknowledging the business environment” (p. 90).

2.2.4) Changing Business Models

Business models are continuously evolving the consideration of e-Business is one such of business evolution. It is noted that research is focused on market exploitation of e-Business technologies. This has caused business model debates to become topical where the acceleration in e-Business has prompted the transformation of existing business models or the establishment of new business models aimed at exploiting the opportunities created through technological innovations (Pateli & Giaglis, 2004). The most significant impact of e-Business is that business configurations have multiplied, increasing the complexity and difficulties faced by managers. Thus, e-Business has created increased choices, which has made the “design and implementation of business models a rather complex and difficult task” (Pateli & Giaglis, 2004, p. 302).
2.2.5) Contingency Factors and Interdependencies

As a result, contingency factors exist between isolated and interactive business models. Significantly, isolated business models leverage current resources and capabilities through existing opportunities to widen their entrance into new markets. Interactive business models combine, integrate, and leverage internal resources with the capabilities to create new opportunities and innovation, which is important when entering low-income markets (Sanchez & Ricart, 2010b). It is noted that three common concepts related to business success are business models, strategy, and tactic. As previously discussed, a business model refers to how the firm operates and creates value for its stakeholders. Strategy refers to the choice made by the business about what business model will be used for competition within the global marketplace. Tactic refers to “the residual choices open to a firm by virtue of the business model it chooses to employ” (Casadesus-Masanell & Ricart, 2010, p. 202).

Several studies agree that business models have several interdependencies that can be analysed (Jalilian et al., 2007; Zhao et al., 2010). This allows the opportunity for interested parties to examine the level of value creation. In fact, it is suggested that the most successful company is the one that has “taken advantage of these structural changes to innovate in their business models,” which has allowed for the ability to compete in different ways (Casadesus-Masanell & Ricart, 2010, p. 195). Thus, the business model impact on the ecosystem (commonly defined as being a socioeconomic community) can be analysed to develop a specific venture. Furthermore, business models are dynamic, which analyse choices and consequences of activities over time and determines the relationships within the ecosystem and can result in virtuous cycles. This is especially critical in low-income markets due to uncertainty of the markets. Specifically, within low-income markets, it is difficult to understand the cause and effect on these relationships and value creation impact. Thus, this opportunity allows the company to increase its efficiency, as the company “refines and extends its own skills, capabilities and resource” (Sanchez & Ricart, 2010b, p. 149).

2.2.6) Business Model and Value Creation

It has been established that business models are crucial to value creation for the company’s stakeholders. Thus, value creation is accomplished through one of two different approaches: static or transformational. The static approach is designed to be “a blueprint for the coherence between core business model components,” whereas the transformational approach is designed to be used “as a tool to address change and
innovation in the organization, or in the model itself” (Demil & Lecocq, 2010, p. 227). The accumulation of resources over the course of a company’s lifetime causes continuous and unique reactions, which allow the company to differentiate from others within its sector. Thus, business models are commonly designed to create sustainability (Demil & Lecocq, 2010). As a result, business performance is a critical part of the business model and the resultant value creation.

In the framework identified by Demil and Lecocq (2010), “the business model's ongoing dynamics come from the interactions between and within the core model components. Interactions between components will follow choices to develop a new value proposition, to create new combinations of resources or to make changes in the organizational system, and the impacts such adaptations will have on the other components and their subsidiary elements” (Demil & Lecocq, 2010, p. 234). Interactions that exist within the core model components can cause other components to change. As a result, value proposition can change in these situations (Demil & Lecocq, 2010).

2.3) Regulation

2.3.1) Regulation and the Financial Crisis

Financial regulation is crucial because it details the design, implementation, and reform of financial policies. However, when weaknesses occur within financial regulation governance, incidents can occur, such as the global financial crisis of 2008 (Levine, 2012). The global financial crisis occurred due to ineffective financial policies that caused financial market destabilisation. However, significantly, it was seen that those responsible for the financial policies knew that the market was becoming increasingly fragile due to the policies and “had ample time and power to adjust their policies under relatively calm conditions” (Levine, 2012, p. 39). It was noted that financial policies were not in the best interest of the public. In retrospect, the ineffective financial policies were only a partial cause of the financial crisis. Other more expansive causes occurred due to ineffective governance, which “encouraged financial markets to take excessive risk and divert society’s savings toward socially unproductive ends” (Levine, 2012, p. 40).

Levin’s (2012) research shows that AIG had a high rating through the SEC, which led to increases in banks purchasing protection from the company. However, the banks were still making unsafe investments and providing risky credit to underqualified borrowers (Levine, 2012). Since AIG sold credit default swaps (hereafter CDS)
protection, the company boomed as sales increased. Yet, banks used this protection to “reduce capital and invest in more lucrative, albeit more risky, assets” (Levine, 2012, p. 46). In fact, although AIG became aware of the risks and varying concerns tied to the banking system due to CDS, sales continued. Furthermore, the Fed began voicing concerns regarding fraud in lending situations, yet did nothing to stop it, allowing companies like AIG to continue making sales. Therefore, the instability of the banking system caused AIG to become increasingly fragile (Levine, 2012).

2.3.2) Increased Scrutiny
According to Ferren (2012), an effective mechanism for resolving troubling elements of Payment Protection Insurance (PPI) market practice was increased scrutiny from the competition authorities (Ferran, 2012). Therefore, one effective regulatory method may be greater scrutiny of business operations. However, this has not been entirely successful. In fact, in 2005, the mis-selling of PPI was made an early thematic priority by the FSA. It was noted that self-regulation had not stopped the problem through initial inquiries by the FSA. As a result, the FSA commanded the industry to improve, but there were ongoing concerns about the “lack of information to customers, inadequate suitability checks, and poor training, systems and controls” (Ferran, 2012, p. 255).

2.3.3) Open-Ended Regulation
However, open-ended regulation has gained momentum most recently. In fact, the New Institutional legal endogeneity model notes that “businesses commercially-rooted constructions of what is entailed in compliance with ambiguous legal norms tend to gradually infiltrate the state’s legal and administrative systems” (Gilad, 2014). This was headed by the Treating Customer Fairly (TCF) initiative and begun due to “recurring scandals of customer abuse by financial firms” (Gilad, 2014, p. 135). Within this initiative, managers need to assume responsibility and treat customers fairly. This initiative addressed several issues, such as “employees remuneration and the design of financial products” (Gilad, 2014, p. 135).

Originally, this initiative was not taken seriously. However, in time, more elaborate structures were introduced by companies regarding customer treatment monitoring. There were little changes made to processes and practices. As such, customer feedback was considered in commercial businesses, especially through enhancing customer satisfaction, loyalty, and advocacy. Thus, according to the FSA, companies need to show that the structures make a difference for customers and that objective fair treatment cannot be measured through feedback and satisfaction indicators. This
caused many companies to include components that assessed “customers understanding of their financial transactions” (Gilad, 2014). Thus, prior to complying with the TCF, companies engaged in opportunistic behaviour (Klein, Crawford, & Alchian, 1978). In fact, “business relationships are often structured in highly complex ways not represented by simple vertical integration” (Klein et al., 1978, p. 298).

It can be further argued that regulations have an impact on performance. Naceur and Omran (2011), for instance, suggest that “corruption increases the cost efficiency and net margins while an improvement in law and order variable decreases the cost efficiency without affecting performance” (Naceur & Omran, 2011, p. 2).

2.3.4) Regulation and Small Business
There are significant differences between small and large business in relation to business regulations. For many countries, small businesses are vital to the economy and social well-being. However, in some countries, such as Australia, the needs of small businesses are not considered in context to regulatory needs, simply because business regulations are geared towards large companies. Accordingly, Sharp (1999) asserts that the “the cost of regulatory compliance takes up a larger proportion of small business revenue compared to large business.” He further opines that “the implementation of regulation causes some unintended and unexpected difficulties that negatively impact on the performance of businesses especially small medium enterprises” (Sharp, 1999, p. 124).

Therefore, the burden of regulation compliance is immense for small businesses. In fact, in Australia, the existing business regulations have been redesigned to focus on “enhancing their efficiency and contribution to the local economy” (Heenetigala, Armstrong, & Clarke, 2011, p. 43). This is an important consideration, especially when small businesses are commonly focused on earning a profit rather than following regulations. As a result, it may be more beneficial for other countries to follow Australia’s example and find ways to utilise existing regulations to assist small businesses to become efficient, allowing them to contribute to the economy and follow the regulations put forth by different agencies.

Part of the issue with small business’ regulatory compliance relates to the amount of red tape that must be navigated through. Since small businesses have fewer than 50 employees in most cases, there may not be enough people in order to take the time to maintain compliance. Another significant issue associated with small business
compliance with regulations relates to the cost of compliance. Since the costs are typically the same for small and medium/large businesses, there is commonly not a vast amount of money available within the company to pay for regulatory compliance.

Heenetigala et al.’s (2011) research indicates that “the purpose of regulation of corporate governance is to reduce risk and maintain order and confidence in the corporate capital market and to safeguard the investments of shareholders” (p. 45). However, in countries like Australia, governance can be internal, causing a company to be exempt from following governmental regulations. At the same time, it was also found that “compliance with corporate regulations for small businesses was in many cases left to accountants due to the difficulties encountered” (Heenetigala et al., 2011, p. 49). Thus, for many small businesses, the compliance time period was too short, suggesting that compliance may be more likely to occur if small businesses had more time to reach compliance, provided it does not impede on the ability to earn profit.

2.3.5) Treating Customers Fairly
According to the FSB, the Treating Customers Fairly (hereafter TCF) regulation ensures that regulated financial institutions meet specific fairness outcomes. TCF forces these companies to consider their customers at different levels of the company-customer relationship, including product design, marketing, point-of-sale, and after-sale. Thus, companies are required to prove that customers are treated fairly (FSB, 2011b). Globally, financial protection is crucial to consumers. Therefore, Akinbami’s (2011) study was designed to focus on the different ways that consumer protection was initiated in the UK, particularly after the financial crisis. The study was conducted through the analysis of literature on behavioural economics and psychology, allowing for the critical analysis of the UK’s supervision of financial firms. Ultimately, it was found that “non-interventionist approaches to consumer protection, which are based on the traditional theories of the law and economics movement, have failed. As a result, there is now a shift in thinking towards more interventionist approaches” (Akinbami, 2011, p. 134). However, value proposition is also important to positive customer treatment.

2.3.6) Treating Customers Fairly and Value Creation
Amit and Zott (2001) found that value can be created through new ways of enabling transactions. Thus, the developed business model established that value creation can be attributed to four inter-dependent factors: “efficiency, complementarities, lock-in, and novelty” (Amit & Zott, 2001; Chesbrough, 2010). The study was conducted through the
analysis of different theories in relation to their effect on value creation. The authors concluded that the value creation potential of e-businesses cannot be explained through any one entrepreneurship or strategic management theory. In fact, “a business model depicts the design of transaction content, structure, and governance so as to create value through the exploitation of business opportunities,” (Amit & Zott, 2001, p. 493; Casadesus-Masanell & Ricart, 2010) suggesting that the business model is rooted in innovation and is a source of value creation.

2.3.7) Treating Customers Fairly and Ethics
The basis for treating customers fairly is ethical in nature and to protect the customer (Edwards, 2006). According to Edward (2006), it is noted that no one approach can be utilised within the financial services sector, due to the size and diversity of the market. Thus, a checklist approach to TCF would not be appropriate since ‘fairness’ is classified as being flexible (Edwards, 2006). Rather, a principle approach to TCF is more appropriate because it allows senior members of management to determine what ‘fairness’ means in terms of the individual company. This allows the company to determine where ‘fairness’ is not being accomplished (Briault, 2005; Edwards, 2006). There are difficulties, however, that occur when the FSA attempts to explain what TCF means. Thus, some argue that TCF is focused on cultural change. Therefore, the FSA has labelled TCF as being an ethical framework for financial services. As a result, FSA has accepted numerous complexities that are involved in cultural changes. FSA may assist those companies that wish to adopt these changes, which may spark a wider debate regarding “an ethical approach to financial services” (Edwards, 2006, p. 242).

2.3.8) Engagement of Companies in TCF
The TCF measure is gaining momentum in businesses across the globe. This measure “aims to stimulate the self-regulatory capacity of the regulated population to advance socially desirable goals – in this particular case, fair treatment for customers” (Georgosouli, 2011, p. 405) Therefore, companies must engage in “self-evaluation, design, and management of their operations and internal governance and controls” in order to ensure customers are treated fairly and consumer protection exists (Georgosouli, 2011, p. 411). Ultimately, “TCF is an outcomes-based regulatory and supervisory approach designed to ensure that specific, clearly articulated fairness outcomes for financial services consumers are delivered by regulated financial firms” (27four Investment Managers, 2014). In fact 27four Investment Managers (2014) has a different approach to TCF. For instance, the company focuses on leadership, strategy, decision-making, governance and control, performance management, and rewards.
This is done by the Board and management working together to provide direction for the company, as well as ensuring that TCF behaviours and outcomes are delivered efficiently. TCF aims are not only considered to be solely relating to company vision and values. TCF aims are “built into the company’s strategic and business plans” (27four Investment Managers, 2014). The goal of the decision-making protocols and governance structures were to ensure that all decisions reflected the TCF strategy. Furthermore, the policies in place are “designed to cater for TCF considerations and include TCF measurement systems and identification of TCF risks” (27four Investment Managers, 2014, p. 2). This allows performance management to occur, especially through the proper training of employees and management of TCF initiatives and deliverables. Finally, the rewards are designed to avoid conflicts of interest (27four Investment Managers, 2014). The company’s TCF outcomes are shown in Table 2.

Table 2: TCF Outcomes

<table>
<thead>
<tr>
<th>Outcome 1</th>
<th>Customers are confident that they are dealing with a firm where the fair treatment of customers is central to the firm culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome 2</td>
<td>Products and services marketed and sold in the retail market are designed to meet the needs of identified customer groups and are targeted accordingly</td>
</tr>
<tr>
<td>Outcome 3</td>
<td>Customers are given clear information and are kept appropriately informed before, during and after the time of contracting</td>
</tr>
<tr>
<td>Outcome 4</td>
<td>Where customers receive advice, the advice is suitable and takes account of their circumstances</td>
</tr>
<tr>
<td>Outcome 5</td>
<td>Customers are provided with products that perform as firms have led them to expect, and the associated service is both of an acceptable standard and what they have been led to expect</td>
</tr>
<tr>
<td>Outcome 6</td>
<td>Customers do not face unreasonable post-sale barriers to change product, switch provider, submit a claim or make a complaint</td>
</tr>
</tbody>
</table>

Source: 27four Investment Managers (2014, pp. 3–8)

2.4) Operational Efficiency

Operational efficiency is crucial to firm performance. In fact, according Baik, Chae, Choi, and Farber (2013), it was found that there is a positive association between “efficiency change measures based on frontier analysis” and “current and future profitability changes.” This is significant because operational efficiency could be measured even when the fundamental signals and changes in asset turnover were controlled. As a result of the study conducted by Baik et al (2013), it was found that
companies that improve efficiency will have “higher profitability changes in the current and future years” (Baik, Chae, Choi, & Farber, 2013, p. 1017). A study performed by Baik et al. (2013) found that companies that improve efficiency will have “higher profitability changes in the current and future years” (Baik et al., 2013, p. 1017). However, operational efficiency comes in various ways. Islamic banking, for example, does not permit interest charges. This is because this system finds that “only goods and services are allowed to carry a price” (Beck et al., 2013, p. 433). However, Islamic banking is heavily reliant upon profit and loss, including risk-sharing “on both the liability and asset side and posits that all transactions have to be backed by a real economic transaction that involves a tangible asset” (Beck et al., 2013, p. 433).

2.4.1) Competition and Operational Efficiency
Competition is a tremendous aspect of operational efficiency. To this effect, competition determines whether or not a business will succeed. Thus, competition is instrumental in determining what activities of the company “can contribute to its performance, such as innovation, a cohesive culture, or good implementation” (Porter, 1985, p. 1). The goal of competitive strategy is to “establish a profitable and sustainable position against the forces that determine industry competition,” which is considered to be the fundamental arena of competition (Porter, 1985, p. 1). A more recent study by Ricart (2011) echoes this sentiment, indicating that strategy is one of the most significant building blocks of competition. It has been this way for over three decades; however, now and in the future, competition and sustainable advantage may be established through the business model. However, during the 1990s, the business world all over the globe saw the “convergence of information and communication technologies” (Ricart, 2011, p. 3). This led to new interest in business models, especially as they are affected by “deregulation, technological change, globalization, and sustainability” (Ricart, 2011, p. 3).

2.4.2) Relationship between Business Models and Operational Efficiency
Business models and operational efficiency are related. That is, following the establishment of a business, a business model is developed that “describes the design or architecture of the value creation, delivery, and capture mechanisms it employs” (Teece, 2010, p. 172). As such, it is noted that the business model defines how value is delivered to “customers, entices customers to pay for value, and converts those payments to profit” (Teece, 2010, p. 172). Therefore, business models reflect how the business views customers, analyses what customers want, how it is wanted, and how the company can utilise its existing resources “to best meet those needs, get paid for
doing so, and make a profit” (Teece, 2010, p. 172). However, the traditional balance that existed between the customer and supplier has been altered due to developments within the global economy. For instance, due to technological innovations, such as new communications and computing technologies, the customer has more choice (Teece, 2010). Other changes to the traditional balance have occurred, for instance, the formation global open trading regimes. Since the customer has more choices, a variety of needs can be expressed and resolved, allowing supply alternatives to become transparent. Therefore, it is necessary for companies to “be more customer-centric, especially since technology has evolved to allow the lower cost provision of information and customer solutions. These developments, in turn, require businesses to re-evaluate the value propositions they present to customers in many sectors, as the supply side driven logic of the industrial era has become no longer viable (Teece, 2010, p. 172).

2.4.3) Points of Operational Efficiency
Operational efficiency includes three points: process innovation, the effective use of digital information, and the supplier connection (Goldman, Nagel, & Preiss, 1995; Preiss, Goldman, & Nagel, 1996). In addition, business and theoretical models can be based on grounded theory. Thus, grounded theory allows companies to “think beyond conventional finance constructs and to relate bank models to a wider theoretical literature concerning intellectual capital, organizational and social systems theory, and performativity” (Chen et al., 2014, p. 563). The development and understanding of these business models is crucial to performance, as well as for understanding the inferences to systematic risk and financial services regulations (Chen et al., 2014). For example, higher technical efficiency typically leads to more profitable companies. Thus, there is a significant impact on an entity’s financial performance (Chortareas, Girardone, & Ventouri, 2012b; Naceur & Omran, 2011).

2.4.4) Operational Efficiency Factors
Operational efficiency comes as the result of many different reasons. For instance, changes in Europe’s financial services sector has altered due to “the increasing weight of the capital markets in mediating offer and demand for capital (disintermediation), the enforced diffusion of IT in sales, development and processing of financial services, fierce competition in national markets as well as the rising globalization of the entire industry” (Werner & Moormann, 2009, p. 7). However, it should be no surprise that the financial crisis has changed the financial service sector as well as the regulatory environment, especially in Europe. In fact, the “economic and political target of the
The process of deregulation and harmonization is to intensify competition in a single and homogeneous European market for financial services” (Werner & Moormann, 2009, p. 7). Importantly, there are two areas to garner a competitive edge: cost leadership and differentiation. There are also “three generic corporate strategies: specialization, cost leadership, and differentiation” (Werner & Moormann, 2009, p. 8). This framework can transferred into the financial services sector to observe the current behaviour (Canals, 1993; Porter, 1985).

Within the financial industry, it has been suggested that regulations affect the efficient operation of companies. For instance, regulation implementation aimed at restricting or limiting the entities activities has an effect on business conduct and efficiency (Chortareas et al., 2012b). Operational efficiency is negatively affected because the entity may engage “in riskier activities and invest in ways that circumvent regulation,” which can impact economic performance (Chortareas et al., 2012b, p. 292). This is highly significant, especially when considering that regulation rules are commonly inaccurate. As a result, regulatory rules must “truly reflect the risks involved” in order to maintain operational efficiency (Chortareas et al., 2012b). If these risks are not adequately considered, value creation is not established effectively.

This is important when considering economic theory because “cost inefficiencies and market power may be reflected in high costs” (Chortareas et al., 2012b, p. 294). This is acknowledged in Chortareas et al.’s (2012) study, which found that larger entities “operating in countries with less concentrated and more developed systems tend to have relatively higher levels of efficiency” when considering the impact of regulations and that “the functioning of national political systems may affect the efficient operations” (Chortareas et al., 2012b, p. 301).

2.5) Summary

It is noted that business models are composed of partners, activities, resources, value proposition, customer relationships, supplier and distribution channels, and customer segments. However, business models are affected by governmental regulations and customer loyalty (EY Global, 2015). These regulatory changes can affect how customers are treated and operational efficiency.

The goal of regulatory changes has been to improve competition and profitability. Despite these goals, the results of the regulation evolution have not been apparent. The only obvious impact has been the increasing knowledge that the company must be
operationally efficient. However, it is noted that regulations can make operational efficiency difficult to achieve. Operational efficiency can be associated with cost reductions because reduced costs can result in increased profits (Chesbrough, 2007; Gilad, 2014; Naceur & Omran, 2011).

Business models are changing, and new business rules have been developed in order to compete effectively. Therefore, business models, as they exist now, may not be beneficial to the new rules. This will require that these business models be modified, which will affect the use of human capital, supply channels, distribution channels, marketing channels, sales, manufacturing and purchasing, internal control, and innovation, and research and development (Blakemore, 2006; George & Bock, 2011). Thus, de-regulation focuses on increasing competition, whereas re-regulation focuses on stability and the minimisation of risk (Zhao et al., 2010).

Business model regulations must be culturally acceptable and ethical, simultaneously. In order to achieve this, profitability may be reduced. However, business models are crucial for developing the strategy of a company, such as through innovations and technology (Baden-Fuller & Morgan, 2010). Despite this knowledge, it can be argued that a strong business model is more beneficial than technology (Chesbrough, 2007). This is due to value creation and value capture. Innovation, however, stimulates economic growth, competition, profitability, and long-term continuity. Finally, corporate sustainability is crucial for value creation through eco-efficiency (Baden-Fuller & Morgan, 2010; Bos-Brouwers, 2010). Business models define how a company makes its decisions, defines and delivers value, and makes a profit. They are considered to be conceptual frameworks that utilise many different elements. However, the most important elements are value creation, value proposition, and value delivery. No one element is able to determine the exact method of creating an effective business model. It is agreed by most, however, that value creation is perhaps the most important driver for the development of the business model (Amit & Zott, 2001; Zott, Amit, & Massa, 2010; Zott et al., 2011). Technological innovations help to create value. However, value proposition must occur first. It is noted that the business environment includes both external and internal aspects. Strategy is based on the external environment. In contrast, the internal environment is considered through organisational structure and culture, including employees (Amit & Zott, 2001; Luoma, 2014).

Despite this, with the development of technology, the relationship between the business model and businesses is changing (Chesbrough, 2007). This has caused
business model debates to become topical. As the acceleration in e-Business has prompted the transformation of existing business models or the establishment of new business models aimed at exploiting the opportunities created through technological innovations (Pateli & Giaglis, 2004). As a result, contingency factors exist between isolated and interactive business models.

Treating Customers Fairly is one such regulation that affects business models. The TCF initiative forces these companies to consider their customers at different levels of the company-customer relationship, including product design, marketing, point-of-sale, and after-sale. As such, the basis of treating customers fairly is ethical in nature and the basis of this regulation is to protect customers (FSB, 2011a).

However, operational efficiency is affected by regulations such as TCF. Competition is a tremendous aspect of operational efficiency. Accordingly, competition determines whether or not a business will succeed. Business models and operational efficiency are related (Edwards, 2006; Littauer, 2011; Zott et al., 2011). This leads to the argument that business models cannot possibly meet the regulations put forth by the regulatory authorities, including the TCF, and remain operationally efficient.
CHAPTER 3: RESEARCH QUESTIONS AND HYPOTHESES

Research questions and hypotheses develop the focal points in a study. They, in effect, provide information regarding what can be expected to be learned from the results findings from the study. Research questions and hypotheses are important for guiding the researcher in many different aspects. For example, the researcher can use the variables found in the hypotheses to focus the literature review. Furthermore, the questions can be used to develop background and/or historical information regarding the topic, which can assist in understanding the topic as a whole before the study is conducted.

Research questions are important for creating the overall anticipated impact of the study. This means that research questions allow the focus for a study to be developed and drawn. As a result, a well organised study requires well-defined research questions, which allows for the design of a study to be developed that will assist in closing a knowledge gap. Research questions help the researcher develop population and sample size information, criterions necessary for selection in the study and data analysis decisions. The FINER method uses certain criteria in order to establish validity in terms of research questions. These criteria include: feasibility, interesting, novelty, ethical, and relevant (Farrugia, Petrisor, Farrokhyar, & Bhandari, 2010).

Trochim (2006c) suggests research questions can be descriptive, relational, or causal. Descriptive research questions focus on “describing what is going on or what exists” (p.1). Relational research questions focus on determining “the relationship between two or more variables” (Trochim, 2006b). Causal research questions focus on determining “whether one or more variable causes or affects one or more outcome variables” (Trochim, 2006b, p. 1). However, it is not required that studies be based on only one type of question. That is, it can have a combination of question types. Considering this information, the following causal research questions were developed:

1) To what extent have regulations affected operational efficiency?
2) To what extent have regulations affected business models?
3) To what extent have regulations affected how customers are treated?

Once the research questions were developed, the research hypotheses were determined. Typically, research hypotheses are created in order to “speculate upon the outcome of a research or experiment” (Shuttleworth, 2008b). Research hypotheses,
therefore, are important for engaging currently known information (existing studies) and what is not yet currently known (knowledge gaps). These were based on the literature review and existing information, as well as the goals of this study. The research hypotheses developed were:

1. According to current employees, underwriting management agencies have achieved high rates of operational efficiency.
2. According to current employees, regulations have affected business models and how customers are treated.

The null hypotheses were:
1. According to current employees, underwriting management agencies have not achieved high rates of operational efficiency.
2. According to current employees, regulations have not affected business models and how customers are treated.

This information is important because it assists in developing the methodology and research design. That is, by knowing the type of question and hypothesis, the researcher can determine what type of data collection would be most effective for the study. For instance, if the question is causal, as in this case, it is seen that qualitative, quantitative, or a combination of the methods can be used to answer the questions.
CHAPTER 4: RESEARCH METHODOLOGY

The purpose of the research methodology section is to develop the mechanisms needed to answer the research questions. The chapter begins with a re-assertion of the previously established research questions and hypotheses. The research questions for this study were causal and included:

1. To what extent have regulations affected operational efficiency?
2. To what extent have regulations affected business models?
3. To what extent have regulations affected how customers are treated?

Based on this information, the researcher employed methodology designed to answer these questions effectively and to prove or disprove the hypotheses, which are provided below:

1. According to current employees, underwriting management agencies have achieved high rates of operational efficiency.
2. According to current employees, regulations have affected business models and how customers are treated.

The null hypotheses were:

1. According to current employees, underwriting management agencies have not achieved high rates of operational efficiency.
2. According to current employees, regulations have not affected business models and how customers are treated.

Therefore, the methodology was designed around the research questions and research hypotheses, which allowed for the development of the variables. It was established based on the causal nature of the research questions that the study was a combination of a descriptive and correlational quantitative approaches.

4.1) Methodology

The methodology allows future researchers to “replicate the study and to understand that all steps in the scientific method the researcher followed to ensure the reliability and validity of the study” (Dusick, 2014, p. 3). Thus, the researcher developed methodology that can be easily followed and replicated. As a result, validity was established because the researcher provides supporting evidence to adequately
support the design. Reliability was established by ensuring that the study could be replicated in its entirety.

The study was conducted using a quantitative, descriptive research design and correlational research design (Blakstad, 2008). This style of design was believed to be the most effective in order to answer the research questions. The descriptive research design “is a scientific method which involves observing and describing the behaviour of a subject without influencing it in any way” (Shuttleworth, 2008a, p. 1). This meant that the study was based on the description of the results, excluding any influence the researcher may have had. However, this type of study cannot definitively prove or disprove a hypothesis, as the study is correlational in nature. This specific study deviated through the traditional descriptive research method in that it does prove or disprove the hypotheses through the correlative nature of the study. As a result, through the combination of the study methods (descriptive and correlative), the researcher was able to address different aspects of the study. This was done in order to assure the needs of the study were effectively met. Thus, the study encompasses components of a correlational study. As a result, the study was able to definitively answer the hypothesis. That is, the study aimed to determine the strength of the causation of the dependent variables by the independent variable. Therefore, the relationship was measured in its entirety through the descriptive correlative study.

As a result of the descriptive nature of the study, the hypotheses were not considered to be proven or disproven. Rather, due to the correlational nature of the study, the hypotheses were considered to be confirmed or unconfirmed. In this way, there is still room for individual conclusions to be drawn regarding the study results, allowing various companies and policymakers to adapt different aspects of the study to their own specific situations, and promotes the ability of interested parties to develop recommendations that will best meet their individual needs. Since this study utilises aspects of two separate designs, it became possible for the study to definitively test the hypotheses through answering the research questions.

4.2) Unit of Analysis

Unit of analysis refers to “the most basic element of a scientific research project” (Long, 2004, p. 2). In other words, the unit of analysis is a major component of a study. However, it is important to note that the unit of analysis is not necessarily the same as the unit of observation (Long, 2004). This suggests that the unit of analysis may not necessarily be seen, but measured. Therefore, unit of analysis is understood as being...
“the ‘who’ or ‘what’” that is being studied (Institute, 2015, p. 1). Based on the units of analysis, the variables in the study are known. Based on the research questions, the units of analysis are operational efficiency, how customers are treated, and regulations. The differences in the units of analysis are shown in the following two paragraphs.

The independent variable is the one that causes the reaction / impact (Creswell, 2013; Sirkin, 2006). In other words, variable A (independent) causes variable B (dependent). In this case, the independent variable is regulations. This is because the research questions are causal, defined as those research questions that determine “whether one or more variable causes or affects one or more outcome variables” (Trochim, 2006b, p. 1). The dependent variables were most effectively determined through the research hypotheses. Thus, the focal point was to determine whether or not regulations cause the dependent variables. This allowed the research questions to be answered most effectively.

The dependent variable is the one that is caused by the independent variable (Creswell, 2013; Sirkin, 2006). Using the analogy from earlier, the dependent variable is variable B. In this case, the dependent variables were operational efficiency and how customers are treated. The relationship between the variables is shown in the model below.

Figure 3: Conceptual Framework
Measurements are conducted for the two dependent variables through the survey and Likert Scale. It needs to be noted that the independent variable is identified through the survey and Likert Scale as well.

4.3) Population
The research population is defined as “a large collection of individuals or objects that is the main focus of a scientific query” and “a well-defined collection of individuals or objects known to have similar characteristics” (Explorable.com, 2009, p. 1). It is further important to highlight that, “all individuals or objects within a certain population usually have a common, binding characteristic or trait” (Explorable.com, 2009, p. 1). Therefore, the population is considered to be broad. Since this study is based on underwriting managers, the population is underwriting managers. The specific characteristic is short-term insurance. Therefore, the specific population is short-term underwriting managers who operate in the insurance industry.

As noted, the study specifically focused on short-term underwriting managers. The researcher had easy access to 17 UMA’s who received the survey and were expected to distribute it other to related companies, resulting in at least 50 responses. It was approximated that there were over 200 underwriting managers in South Africa (RISKSA, 2014). The survey was sent to five levels of staff in each organisation, including managing directors/CEO, management, and junior staff. It was established that this would ensure that a sufficient sample was obtained, as well as consider differences in opinion throughout the organisation. It was expected that sending the survey to different levels of staff would allow the study to encompass different opinions per ranking in management hierarchy.

4.4) Sampling
The two types of sampling strategies are probability and non-probability. The primary difference is that probability sampling involves random sampling, whereas non-probability does not involve random sampling. Probability sampling includes random sampling and allows “an equal and independent chance of being selected” (Landreneau, 2011, p. 3). This decreases the likelihood of researcher bias. Due to the randomness of the sample, validity and reliability is increased. The types of probability sampling include “1) simple random, 2) stratified random, 3) cluster, and 4) systematic” (Landreneau, 2011, p. 3). In contrast, non-probability sampling includes “a variety of sampling techniques for selecting a sample,” which is appropriate when random sampling cannot be done because there is no “complete list of the population”
The non-probability sampling techniques include 1) quota, 2) convenience, 3) self-selection, 4) purposive, and 5) snowball (Saunders & Lewis, 2012). Furthermore, it is suggested that non-probability sampling can increase the possibility of researcher bias and unethical behaviours to occur.

This study used non-probability sampling, particularly convenience and snowball sampling strategies. Convenience sampling is based on easy access capabilities by the researcher (Saunders & Lewis, 2012). Snowballing sampling is conducted based on initial contact for a group of people, in which subsequent participants are selected based on this initial contact (Zikmund, Babin, & Griffin, 2012). These strategies were emphasised by providing the survey to the local companies, allowing them to distribute the survey to related companies in the area.

A sample must be large enough to obtain adequate results, yet meet the anticipated size of the population (Smith, 2013). As a result, it is necessary to determine how many companies were in the area. It was approximated that there were 100 companies in the local and surrounding areas. The researcher sent the survey to 12 companies with the expectation that the receiving company would spread the survey to related companies. The fact that the researcher targeted more than one individual per company would result in at least 50 responses.

4.5) Research Instrument
A Likert scale was determined to be the most effective way of obtaining the quantitative data needed for the study, and is defined as being “a unidimensional scaling method” (Trochim, 2006a, p. 1). Unidimensional scaling refers to having a degree of measurement. For instance, within this study, measurement occurred by asking whether or not respondents agreed more or less with particular statements. Quantitative research uses numbers and “a positivist or natural science model and an objectivist view of the models studied” (Zikmund et al., 2012, p. 17). Significantly, quantitative data uses deduction when testing the hypotheses and answering the research questions. Quantitative data provided through the Likert scale was measured on a 1 to 7 basis, where 1 was ‘never,’ 4 was ‘neutral,’ and 7 was ‘always.’ This was proposed by Zikmund et al. (2012), which showed that data collection styles were related to the respective theories (Zikmund et al., 2012).

The Likert scale results were obtained through a survey. A survey is different from a questionnaire in that a survey measures the “opinions or experiences of a group of
people through asking questions” (Penwarden, 2014). A questionnaire, in contrast, involves “a set of printed or written questions with a choice of answers”. Since there is a choice of answers, the questionnaire is best used through statistical analysis. This requires that the variables (defined earlier) be identified through the survey (Kelley, Clark, Brown, & Sitzia, 2003). As a result, the study utilised a survey including questions created by a questionnaire.

4.6) Data Collection and Analysis
The study was conducted through quantitative data gathered from the results of a survey involving questions utilising a Likert scale. The survey was provided on Survey Monkey, a popular online platform commonly used for research and other survey needs. The questions were closed-ended and multiple choice. The last portion of the survey involved demographic information. Demographic information was considered to be important because it ensured variability in terms of the data collected. For example, within this section, respondents were asked length of time and role within their respective organisations. This information allowed the researcher to have well-rounded results.

Significantly, it is possible to obtain exact meanings through quantitative data through the use of numerical values. Quantitative research explains phenomena through statistical analyses. Thus, qualitative research “can be defined as a type of empirical research into a social phenomenon or human problem, testing a theory consisting of variables which are measured with numbers and analysed with statistics in order to determine if the theory explains or predicts phenomena of interest” (Yilmaz, 2013, p. 311).

The data was analysed using IBM SPSS and included measurements of central tendencies. These measurements were instrumental in determining the validity and reliability of the data through the use of variability. The quantitative data inputted into IBM SPSS allowed the researcher to conduct statistical analysis that could either confirm or refute the proposed hypotheses (Measures of Central Tendency, 2013).

4.7) Limitations
Crucially, limitations and delimitations can alter all studies. However, as individual components, limitations and delimitations are not always understood. Thus, limitations are defined as, “those characteristics of design or methodology that impacted or influenced the application or interpretation of the results of the study. They are the
constraints on generalizability and utility of findings that are the result of the ways in which the study is designed and/or the method used to establish internal and external validity” (USC, 2015, p. 1).

Methodological limitations are study-specific and include many different factors. For example, population size can affect study results. Sample size can affect results in that if the sample size is too small, the results may have little or no impact on the topic and vice versa (Khan, 2011).

Researcher limitations include researcher bias, which refers to “a form of response bias that occurs whenever there is a flaw in a survey's research design. This systematic error can be caused by problems with various different aspects of a study’s research methodology. Most of these issues arise from lack of planning out a clear research purpose and objectives as well as the absence of secondary research before initiating a study. A lack of planning and overall understanding of the topic being studied can make it difficult to create a survey with the correct list of questions and lead to higher amounts of error” (Penwarden, 2013, p. 1).

Ethical considerations are necessary as well as to protect the privacy of the participants. As much of the research conducted was done without anyone being present, there is always the opportunity for the researcher to fabricate data or collect data on false pretences (Israel & Hay, 2006). Before the researcher undertakes any study, it is vital that the researcher inform all the respondents about the purpose, methods, demands of the study, and any associated risk. This will ensure that all respondents make an informed decision as to whether or not to participate in the study (Smith, 2003). The researcher addressed the limitations through offering the study through Survey Monkey. This allows anonymous responding and makes it difficult for false data reporting to occur.

4.8) Conclusion
The goal of this chapter was to develop the methodology used to answer the research questions. Therefore, it opened with a reminder of the research questions and hypotheses. The study sought to determine, through the use of causal research questions, how regulations have affected operational efficiency, how regulations have affected business models, and how regulations have affected how customers are treated. It was expected to find that underwriting managers have achieved high rates of operational efficiency and that regulations have negatively affected business models
and how customers are treated. Based on these assertions and questions, the methodology was devised, leading to the development of the variables. Furthermore, the causal nature of the research questions led to the establishment of a combined descriptive and correlational quantitative study.

The goal of the methodology chapter is to allow other researchers to replicate the study. This is done through ensuring that all steps taken by the researcher can be re-enacted in future studies. This assists in establishing reliability and validity, especially through supporting evidence for the chosen design.

The chosen design is a quantitative descriptive and correlational design and is believed to be the most effective in answering the research questions. The goal of descriptive research design is to observe and describe the phenomena with no influences. The correlational portion of the research design is to measure the strength of the relationship or association between the independent variable and dependent variables. However, it is noted that descriptive studies alone cannot definitively prove or disprove a hypothesis, which is where the correlational portion of the research design came into being. Through the combination of these features, the needs of the study were met effectively.

However, since the descriptive nature of the study does not allow hypotheses to be proven or disproven, the correlative nature of the study allowed the hypotheses to be confirmed or unconfirmed. This was done in order to allow interested parties the ability to meet the expectations of their stakeholders through different aspects of the study. That is, the results from this study can be used in different ways by a multitude of different readers in order to best meet their individual needs.

The simplest aspect of the research design is the unit of analysis, yet it is also a major component of the design. Despite the importance, the unit of analysis may not be the same as observable units. This makes units of analysis beneficial for quantitative studies due to the ability to measure variables numerically. Thus, the unit of analysis is the basis for the research variable. For this particular study, the units of analysis are operational efficiency, how customers are treated, and regulations.

There are independent and dependent variables in quantitative studies. The independent variable causes the dependent variable. In this study, the independent variable is regulations. The dependent variables are operational efficiency and how
customers are treated. Therefore, the relationships relate to how regulations cause operational efficiency and how regulations cause customer treatment. The variable measurements are obtained through the survey and resultant Likert scale.

The research population is a group of individuals or objects that have at least one characteristic or trait in common. Thus, populations can be broad in nature. The common trait for this specific study is insurance. Therefore, the population is underwriting managers. The secondary characteristic is short-term insurance. Therefore, the population is narrowed down to include underwriting managers that operate in the short-term insurance industry.

Limitations are defined as characteristics related to a study that impact the results and can be either methodological or researcher limitations (Khan, 2011). Methodological limitations refers to study-specific limitations and include many different factors (Khan, 2011). Researcher limitations refer to researcher bias. In most cases, researcher bias relates to the research design. Researcher bias may occur in the form of false data reporting (Israel & Hay, 2006). The final limitation classification is ethical and avoidance requires that the researcher inform all respondents regarding the purpose, methods, and demands, and risk associated with their participation in the study (Smith, 2003). The researcher addressed the limitations through offering the study through Survey Monkey. This enabled anonymous reporting, which makes it difficult for false data reporting to occur. In the next chapter, the findings from the study will be discussed.
CHAPTER 5: RESULTS

The purpose of this chapter is to present the research findings.

5.1) Brief Review of the Methodology
The methodology designed for this study is easily followed and replicated. Reliability was established by ensuring that the research study could be replicated in its entirety. The research was conducted through a quantitative descriptive research design and correlational research design. This meant that the study was based on the description of the results, excluding any researcher influence. However, this type of study cannot definitively prove or disprove a hypothesis, allowing the use of hypothesis. As such, this drew in the correlative nature of the study. As a result, through the combination of the study methods (descriptive and correlative), the researcher was able to address different aspects of the study. The study aimed to determine the strength the independent variables caused changes in the dependent variables.

Based on the research questions, the units of analysis are operational efficiency, how customers are treated, and regulations. The independent variable is the one that causes the reaction. Thus, the focal point was to determine whether or not regulations cause the dependent variables. This allowed the research questions to be answered most effectively. The dependent variable is the one that is caused by the independent variable. In this case, the dependent variables were operational efficiency and how customers are treated. Measurements are conducted for the two dependent variables through the Likert scale survey instrument. It needs to be noted that the independent variable is identified through the survey and Likert scale as well.

Since the study is based on insurance companies, the population is UMA’s (underwriting managers) that operate within the short-term insurance companies in South Africa. The specific characteristic is short-term insurance. Therefore, the specific population is underwriting managers. The researcher had easy access to 17 UMAs (Underwriting Managers) who received the survey and were expected to distribute it to other UMAs. The survey was sent to five levels of staff in each organisation, including managing directors/CEO, management, and junior staff. It was established that this would ensure that a sufficient sample was obtained, as well as consider differences in opinion throughout the organisation. It was expected that sending the survey to the different levels of staff would allow the study to encompass different opinions per ranking in management hierarchy. It was approximated that there were over 200
underwriting managers in South Africa (RISKSA, 2014). The researcher sent the survey to 17 companies with the expectation that the receiving company would spread the survey to related companies, resulting in at least 50 responses.

5.2) Data Review
Initially, the data were captured onto an Excel spreadsheet with each variable included in the questionnaire designated into a representative spreadsheet column. The data were subsequently imported into SPSS for subsequent analysis. Prior to proceeding with the analyses, frequency analyses were computed to determine the presence of any missing data. In this study, perhaps due to the small sample size, there were no missing case values for each variable. Therefore, data value replacement and associated efforts were not required.

5.3) Likert Scale Testing
A Likert scale was determined to be the most effective way to obtain quantitative data needed for the study. For instance, within this study, measurement occurred by asking whether or not respondents agreed more or less with particular statements. As a result, the use of the Chi Square test was deemed to be necessary and an effective way to measure categories. This is because the Chi Square test compares the actual responses to expected responses. Therefore, the statistical significance of each hypothesis is evident. If there is a high deviation between actual and expected responses, then the results do not necessarily support the hypothesis.

However, the descriptive nature of this study does not allow hypotheses to be proven or disproven, but rather enables the hypotheses to be confirmed or unconfirmed. This was done in order to allow interested parties the ability to meet the expectations of their stakeholders through different aspects of the study. That is, the results of this study can be used in different ways by a multitude of different readers in order to best meet their individual needs.

5.4) Restatement of the Research Questions and Hypotheses
The research questions for this study were causal and included:

1. To what extent have regulations affected operational efficiency?
2. To what extent have regulations affected business models?
3. To what extent have regulations affected how customers are treated?
Based on this information, the researcher hypothesised:

1. According to current employees, underwriting management agencies have achieved high rates of operational efficiency.
2. According to current employees, regulations have affected business models and how customers are treated.

The null hypotheses were:

1. According to current employees, underwriting management agencies have not achieved high rates of operational efficiency.
2. According to current employees, regulations have not affected business models and how customers are treated.

5.5) Reliability and Validity
As a measure of internal consistency, Cronbach’s alpha was computed for the items that were: (1) non-demographic, (2) completed by all the participants (i.e., no exclusions), and (3) measured on the same Likert scale. The items were questionnaire items 1.2 to 1.9, which included 8 in total (see Appendix A). Cronbach’s alpha for these 8 items was .63, which may be considered low as compared to established norms (i.e., .70). However, Cronbach’s alpha is often susceptible to underestimations of internal consistency, particularly when there is a low quantity of items. Considering the low number of items included in this study, Cronbach’s alpha may indicate an acceptable level of internal consistency.

5.6) Demographic Statistics
Demographic statistics are important in the consideration of the sample. This includes gender, age, length of employment, and company role.
5.6.1) Gender

Figure 4 shows the gender representation of the sample.

The data in Figure 4 shows that 46.15% of the respondents were female and the remaining 53.85% were male. This shows a fairly even split between the genders working within the insurance industry. However, it must be noted that there was a 7.69% increase of males working in the industry, suggesting that women are still behind their “male counterparts” in terms of pay and promotion (Wojcik, 2013). This difference may be significant in relation to the entire population. However, in relation to this sample, there is little significance to the slight increase in male employees. Despite this slight difference, it is important to be aware that gender influences can create particular opinions regarding topics.
5.6.2) **Age**

Figure 5 shows the age representation of the sample.

![Age Representation](image)

Figure 5: Division of Age within the Sample

Figure 5 shows that 29.23% of the respondents were between 26 to 36 years old. It was found that 50.77% of the respondents were between 36 and 46 years old. Finally, it was found that 20.00% of the respondents were 46 years old and older. Considering the aging population, it is unsurprising that over half of the respondents were between 36 and 46 years old, suggesting that the industry is aging and talent needs are growing from younger generations (Resource Pro, 2014). However, it is also considered that age can influence responses and opinions based on generational beliefs and activities. The age profiles offer significant differences across employees, in particular that there are primarily middle aged employees within the insurance industry, it is suggested that many of the concepts within business processes have been established by these employees. However, as younger employees enter the industry, it can be expected that business processes will experience tremendous amounts of innovation.
5.6.3) Length of Employment

Figure 6 shows the length of employment of the sample.

Figure 6: Length of Employment within the Organisation

As shown in Figure 6, within the sample, it was found that 20.00% of the respondents had been employed within their respective companies for 0 to 3 years. Furthermore, it was found that 52.31% of the respondents had been employed with their respective companies for 4 to 8 years. It was found that 18.46% of the respondents had been employed with their respective companies for 9 to 14 years. It was also found that 9.23% of the respondents had been employed with their respective companies for 15 or more years. This appears to be representative of the population when considering the age groups. This suggests that retention and turnover issues exist within the industry, as employees look for higher paying jobs and better benefits. Since the average person changes jobs 11.7 times during their career, this is aligned with these statistics (NLS FAQs, 2014).
5.6.4) Company Role

Figure 7 shows the division of company roles within the sample.

Figure 7: Employee Company Roles within the Sample

As shown in Figure 7, it was found that 6.16% of the respondents were classified as support staff. It was found that 4.62% of the respondents were classified as administrative staff. It was found that 9.23% of the respondents were classified as junior management. It was found that 36.92% of the respondents were classified as middle management. In addition, 43.08% of the respondents were classified as upper management. Considering the rate of turnover throughout the course of employment, these results appear to be representative of the population.

5.7) RQ 1: To What Extent have Regulations Affected Operational Efficiency?

The yes/no context of this question led to sub-questions. Those respondents that replied ‘yes’ were offered three additional questions relating to the extent of influence of technology on their companies. Those respondents that replied ‘no’ were offered three additional questions relating to the extent that the business was altered due to this lack of technology, as well as the effects that the lack of technology had on business operations.
The following figures and tables lend insight towards answering the research question.

Table 3: Length of Employment Perceptions of Revenue Increases

<table>
<thead>
<tr>
<th>Length of Employment</th>
<th>Strongly Disagree</th>
<th>Agree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 3 Years</td>
<td>1</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>4 to 8 Years</td>
<td>3</td>
<td>9</td>
<td>6</td>
<td>11</td>
<td>3</td>
<td>2</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>9 to 14 Years</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>15 Years or More</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
<td><strong>18</strong></td>
<td><strong>14</strong></td>
<td><strong>19</strong></td>
<td><strong>6</strong></td>
<td><strong>4</strong></td>
<td><strong>65</strong></td>
<td></td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>26.819</td>
<td>15</td>
<td>.030*</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>30.478</td>
<td>15</td>
<td>.010</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( a. \) The chi-square test of independence was statistically significant, \( \chi^2 = 26.819, \ p = .030 \) because \( p \) was lower than .05.

A chi-square test (shown in Table 3) of independence was conducted to determine whether the perceptions of revenue increased as a result of operational efficiency depended on the length of employment of the participants. The chi-square test of independence was statistically significant, \( \chi^2 = 26.819, \ p = .030 \) because the \( p \)-value was lower than .05. This indicates that there are differences between employees with different lengths of employment terms of whether revenue increased within their respective organisations as a result of operational efficiency.
According to Figure 8, those employees that have been with their respective company for 4 to 8 years were most likely to be neutral regarding revenue increase due to operational efficiency increases. At the same time, the same group of people were most likely to agree that revenue increased due to operational efficiency. Interestingly, in Figure 8, it was shown that those employees that have been with their respective company for more than 15 years did not fully agree that revenue increased due to operational efficiency. In fact, this group had the lowest rate of agreement among all length of employment categories.
As shown in Table 4, a chi-square test of independence was conducted to determine whether the perceptions of revenue increases as a result of operational efficiency depended on the company role of the participants. The chi-square test of independence was statistically significant, \( x^2 = 40.935, p = .004 \) because \( p \) was lower than .05. This indicates that there are differences between in company roles regarding whether revenue increased within their respective organisations as a result of operational efficiency.

### Table 4: Company Role in Perception of Revenue Increases as a Result of Operational Efficiency

<table>
<thead>
<tr>
<th>Company Role</th>
<th>Company’s Revenue Increased as the Result of Operational Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Support Staff</td>
<td>0</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>0</td>
</tr>
<tr>
<td>Junior Management</td>
<td>0</td>
</tr>
<tr>
<td>Middle Management</td>
<td>0</td>
</tr>
<tr>
<td>Upper Management</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>40.935</td>
<td>20</td>
<td>.004*</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>44.546</td>
<td>20</td>
<td>.001</td>
</tr>
</tbody>
</table>

*a. The chi-square test of independence was statistically significant, \( x^2 = 40.935, p = .004 \) because \( p \) was lower than .05.*
Figure 9: Company Role Perceptions of Revenue Increases due to Operational Efficiency

As shown in Figure 9, middle and upper management were most likely to remain neutral regarding operational efficiency leading to revenue increases. At the same time, middle management had an equal number of respondents that agreed or agreed somewhat that operational efficiency led to revenue increases. This same equality of agreeing or agreeing somewhat also occurred with support staff and junior management. However, as shown in Figure 9, the administrative staff and upper management were the only two groups that voiced disagreement regarding revenue increases due to operational efficiency.
Table 5: Company Role Perception of Expenses Increase in Relation to Operational Efficiency

<table>
<thead>
<tr>
<th>Company Role</th>
<th>Support Staff</th>
<th>Administrative Staff</th>
<th>Junior Management</th>
<th>Middle Management</th>
<th>Upper Management</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company's Expenses Increase in Order to Achieve Operational Efficiency</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Somewhat Neutral</td>
<td>Disagree Somewhat</td>
<td>Disagree</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>3</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>14</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>22</strong></td>
<td><strong>15</strong></td>
<td><strong>5</strong></td>
<td><strong>4</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>35.539*</td>
<td>20</td>
<td>.017*</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>37.869</td>
<td>20</td>
<td>.009</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. The chi-square test of independence was statistically significant, \( \chi^2 = 35.539, p = .017 \)

As shown in Table 5, a chi-square test of independence was conducted to determine whether the perceptions of expenses increased as a result of operational efficiency depended on the company role of the participants. The chi-square test of independence was statistically significant, \( \chi^2 = 35.539, p = .017 \) because the \( p \)-value was lower than .05. This indicates that there are differences between company roles regarding whether expenses increased within their respective organisations as a result of operational efficiency.
According to Figure 10, those in upper or middle management were most likely to strongly agree, agree, agree somewhat, or disagree that expenses increased in relation to operational efficiency. In fact, middle management was the only group to definitely disagree to this statement. In addition, middle and upper management had the most varied responses to this statement.

The results show that 29.23% (See Table 2 for the value used for % calculation) of the respondents are neutral as to whether or not revenue increases due to operational efficiency. This corresponds with the literature, stating that regulation changes can affect operational efficiency. Therefore, it is important to determine how efficient companies are in relation to current regulation requirements. Importantly, there are new business rules that must be understood in order to compete within the global marketplace. This requires the modification of all existing business models. It was established that the majority of the employees agreed that revenue increases as operational efficiency increases. Therefore, it is suggested that operational efficiency is important to the success of the business in terms of earning profits and meeting other organisational goals. It was found that 33.85% (See Table 3 for the value used for % calculation) of the respondents agreed that expenses increased in order to achieve operational efficiency. This corresponds with the literature, arguing that regulations can
inhibit operational efficiency, which can reduce profit or hinder the achievement of established business goals. However, the results suggest that expenses increase, which contradicts the literature, stating that operational efficiency can be associated with cost reductions. This requires that banks focus on their core strengths (Littauer, 2011). This can be attributed to insurance companies as well.

Figure 11: Gender Influence on Management Awareness of Subordinate Activity

According to Figure 11, males were more likely to agree that management is aware of subordinate activities during the workday, making this a statistically significant observation.
At the same time, as shown in Figure 12, 35.38% of the respondents agree somewhat that management is aware of subordinate activities during the workday. Interestingly, middle- and upper-management equally somewhat agreed that management is aware of subordinate activities during the workday. However, middle-management was most likely to be neutral in relation to this item. This suggests that operational efficiency is not necessarily improved. Therefore, it is suggested that future changes need to be made to the business model in order to facilitate awareness. When considering all aspects of agreement, overall, about 70% of the sample agree that operational efficiency has improved throughout their organisation. This is important because it shows employees that regulations and business models are designed to better the company as a whole, as well as protect customers. Literature shows that business models and operational efficiency are related. As such, business models reflect how the business views customers, analyses what customers want, how it is wanted, and how the company can utilise its existing resources “to best meet those needs, get paid for doing so, and make a profit” (Teece, 2010, p. 172). Therefore, management awareness would assist in improving customer/business relations.
5.8) RQ 2: To What Extent have Regulations Affected Business Models?

The following figures and tables provide insight as to the extent of regulation effect on business models.

Figure 13: Age Representation of Regulations Alter how the Company does Business

As shown in Figure 13, one age group (36 to 45 years) agrees more than the others that regulations have altered how the company does business. At the same time, those employees that are aged 46 and older were the only group that disagreed in any way that regulations altered how the company does business. Furthermore, it was noted that females were more likely to agree that regulations have had an effect on how companies conduct their business processes.
The results in Figure 14 show that 47.69% of the respondents agree that regulations alter how the company does business. In fact, over 90% of the respondents, overall, agree that regulations have an effect on business processes. It is also seen in Figure 15, that middle- and upper-management are most likely to agree that regulations affect how the company does business. Therefore, this can result in positive or negative impacts on an organisation, such as through operational efficiency. Business models
are crucial to value creation for the company’s stakeholders. Regulations have an effect on how companies do business. For example, open-ended regulation has gained momentum most recently. Within this initiative, managers need to assume responsibility and treat customers fairly.

5.9) RQ 3: To What Extent have Regulations Affected how Customers are Treated?

The following tables and figures address the final research question.

Figure 16: Gender Representation of Technological Savviness of the Company

According to Figure 16, females were more likely to agree that their company was technology savvy. However, males were most likely to agree somewhat that their company was technology savvy. Interestingly, despite the tendency for females to agree to their company being technology savvy, males were most likely to strongly agree to the same statement. Significantly, only females remained neutral to this statement.
Table 6: Technological Savviness of the Company as a Whole

<table>
<thead>
<tr>
<th>Company Role</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Agree</th>
<th>Agree Somewhat</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support Staff</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Junior Management</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Middle Management</td>
<td>0</td>
<td>8</td>
<td>9</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Upper Management</td>
<td>6</td>
<td>10</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>23</strong></td>
<td><strong>19</strong></td>
<td><strong>5</strong></td>
<td><strong>8</strong></td>
<td><strong>4</strong></td>
<td><strong>65</strong></td>
<td></td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>34.890*</td>
<td>20</td>
<td>.021*</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>38.913</td>
<td>20</td>
<td>.007</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The chi-square test of independence was statistically significant, $x_5 = 34.890$, $p = .021$ because $p$ was less than .05.

As shown in Table 6, a chi-square test of independence was conducted to determine whether the perceptions of technological savviness depended on the company as a whole. The chi-square test of independence was statistically significant, $x_5 = 34.890$, $p = .021$ because the $p$-value was less than .05. This is important in relation to operational efficiency. This aligns with existing literature, stating that it is necessary for companies to “be more customer-centric, especially since technology has evolved to allow the lower cost provision of information and customer solutions. These developments in turn require businesses to re-evaluate the value propositions they present to customers in many sectors, the supply side driven logic of the industrial era has become no longer viable” (Teece, 2010, p. 172).
The results in Figure 17 show that 35.38% of the respondents agree that the company they work for is technologically savvy. However, it is also noted that 12.31% of the employees disagreed that their company is technology savvy. This suggests that although most companies have improved significantly in terms of technology advancements, some have not, which could affect the ability of these companies to update their business models and integrate regulations effectively. At the same time, those in middle- to upper-management were most likely to agree or somewhat agree that the company they work for is technologically savvy.
According to Figure 18, the results show that 47.69% of the respondents agree that regulations affect how customers are treated. This is through the TCF initiative primarily. This aligns with the literature, which finds that the treating customers fairly regulation ensures that regulated financial institutions meet specific fairness outcomes. TCF forces these companies to consider their customers at different levels of the company-customer relationship, including product design, marketing, point-of-sale, and after-sale. Thus, companies are required to prove that customers are treated fairly (FSB, 2011a). Financial protection is crucial to consumers globally. The study results also show that junior, middle, and upper-management were most likely to agree that regulations affect how customers are treated. Since many companies utilise promotions to rise in management roles, it is reasonable to assume that those that agree with the enforcement of these regulations have been on the industry longer. As a result, it is entirely plausible that these employees were employees within the industry before the regulations were initiated, making them reliable sources of information regarding the differences in customer treatment.
According to Figure 19, those employees that have been in the industry for 4 to 8 years were most likely to agree that automation of processes occurred within their company. Significantly, males were most likely to agree or disagree that processes are automated in any way within their respective company. Furthermore, males were more likely to agree that departments were automatically aware of changes in business processes and that changes were automatically updated within the system. Yet, at the same time, females were most likely to agree that 24/7 automation is established within their respective companies for consistency and continuity.
In Figure 20, it was found that 81.54% of the respondents had automated processes in some way within their organisations. As shown in Figure 21, 32.69% of the respondents had 24/7 automation for processes. It was noted that 30.77% of the respondents agreed that all departments within their organisation were automatically aware of changes in processes and that changes to the central system were automatic.
It was found that middle- and upper-management were most likely to find automation processes to be effective. It was also found that middle- and upper-management had the most varied responses regarding operational automation 24/7 with the majority of responses agreed somewhat. Yet, middle-management was most likely to strongly agree on this same question. Furthermore, as shown in Figure 22, those employees with their companies 4 to 8 years were most likely to agree that their company had 24/7 automation. This is important because operational efficiency includes three points: process innovation, the effective use of digital information, and the supplier connection (Blakemore, 2006; Preiss et al., 1996).

5.10) H1: Underwriting Managers have Achieved High Rates of Operational Efficiency

The following figures address the first hypothesis:

Figure 23: Company Loses Profit Due to More Time Consuming Business Processes

As shown in Figure 23, 58.33% of the respondents feel that their respective companies lose profit due to more time consuming business processes, such as compliance with regulations. Other processes include the establishment of security for customers and employees alike, such as through the Protection of Personal Information regulation, as well as changes to the business models. This suggests that operational efficiency is not being achieved.
According to Figure 24, those employees with their companies for 4 to 8 years agree that their company loses profit due to more time consuming business processes. This same group is most likely to agree somewhat to the same question. Interestingly, none in this group definitely agreed that their company lost profit due to more time consuming business processes.

Figure 25: Company has Plans to Increase Technology Innovations
However, as shown in Figure 25, despite these lost profits, an overwhelming majority of the respondents agree that their respective companies have plans to increase technology innovations. This is important because value can be created through new ways of enabling transactions. Thus, the developed business model established that value creation can be attributed to four inter-dependent factors: “efficiency, complementarities, lock-in, and novelty” (Amit & Zott, 2001, p. 493).

Table 7: Age Representation of Work Flow within the Company

<table>
<thead>
<tr>
<th>Age</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Agree Somewhat</th>
<th>Neutral</th>
<th>Disagree Somewhat</th>
<th>Strongly Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 to 35 Years</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>36 to 45 Years</td>
<td>2</td>
<td>9</td>
<td>16</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>46 Years and Older</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>17</td>
<td>26</td>
<td>5</td>
<td>8</td>
<td>1</td>
<td>65</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>21.395*</td>
<td>10</td>
<td>.018</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>22.857</td>
<td>10</td>
<td>.011</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The chi-square test of independence was not statistically significant, \( x^2 = 21.395, p = .018 \), because \( p \) is less than .05.

A chi-square test of independence was conducted (see Table 7) to determine whether the perceptions of the effectiveness of work flow within the company in order to achieve operational efficiency depended on the age of the participants. The chi-square test of independence was not statistically significant, \( x^2 = 21.395, p = .018 \), because the \( p \)-value is less than .05. This indicates that there are age differences between the participants’ perceptions of whether work flow was effective in achieving operational efficiency within their respective organisations in order to achieve operational efficiency. For example, those between 36 and 45 years of age were most likely to agree somewhat that work flow was effective in achieving operational efficiency.
Table 8: Company Role Perception of Effectiveness of Work Flow

<table>
<thead>
<tr>
<th>Company Role</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Somewhat</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Somewhat</th>
<th>Strongly Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support Staff</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Junior Management</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Middle Management</td>
<td>2</td>
<td>4</td>
<td>13</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Upper Management</td>
<td>5</td>
<td>8</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>17</td>
<td>26</td>
<td>5</td>
<td>8</td>
<td>1</td>
<td>65</td>
<td></td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>33.635a</td>
<td>20</td>
<td>.029*</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>21.828</td>
<td>20</td>
<td>.350</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a. The chi-square test of independence was statistically significant, \( x_5 = 33.635 \ p = .029 \) because \( p \) was lower than .05.
The company role chi-square test (Table 8) is significant in relation to whether work flow was effective in achieving operational efficiency. The chi-square test of independence was statistically significant, $x^2 = 33.635$ $p = .029$. At the same time, as shown in Figure 26, middle-management was most likely to agree somewhat regarding the effectiveness of the workflow within the company. However, upper-management was most likely to definitively agree on the effectiveness of the workflow within the company.
It was found in Figure 27 that 41.67% of the respondents agree that their respective companies utilise resources effectively. However, it is found, interestingly, that the value creation potential of e-businesses cannot be explained through any one entrepreneurship or strategic management theory. In fact, “a business model depicts the design of transaction content, structure, and governance so as to create value through the exploitation of business opportunities,” suggesting that the business model is rooted in innovation and is a source of value creation (Amit & Zott, 2001, p. 493).

The results in Figure 27 show that over 80% of the respondents agree that workflow is effective within the company. This could be related to the ineffectiveness of previous regulations. In fact, an effective mechanism for resolving troubling elements of PPI market practice was increased scrutiny from the competition authorities (Ferran, 2012; OFT, 2006). Therefore, one effective regulatory method may be greater scrutiny of business operations. However, this has not been entirely successful. In fact, in 2005, the mis-selling of PPI was made an early thematic priority by the FSA. It was noted that self-regulation had not stopped the problem through initial inquiries by the FSA.

Therefore, based on this data, the null hypothesis is confirmed: Insurance companies have not achieved high rates of operational efficiency.

5.11) Significant Inferential Statistics
Since the questionnaire is limited in the number of questions that were included, inferential statistics are also limited. Some questions were split across the sample,
increasing these limitations. The inferential statistics were conducted in order to meet the objectives and create possibilities for rational interpretations of the results. Through conducting a Spearman rank correlation based on question 1.6 (Awareness of Management of Subordinate Activities During the Workday) positively correlated with item 1.7 (Effectiveness of Work Flow Within the Company), \( r = .57, p < .001 \). This may suggest that the more management is aware and knowledgeable about the activities of subordinates, the more effective the management of the work flow is.

Item 1.8 (Effectiveness of Communication Within the Company) correlated positively with item 1.7 (Effectiveness of Work Flow Within the Company), \( r = .52, p < .001 \). This appears to signify that greater levels of effective communication relate to superior levels of work flow effectiveness within the organisation.

Interestingly, item 1.1 (Automation of Any Processes) did not correlate with item 1.7 (Effectiveness of Work Flow Within the Company), \( r = -.02, p = .861 \). Based on this finding, it may be that the automation of processes does not automatically correspond to superior levels of work flow within the organisation. Thus, it may be that despite attempts to introduce technology to improve the process flow through automation, it seems to have little influence on the intended outcome of improving the effectiveness of the work flow in the organisation. For the company, this means that it will be able to manage work flows more effectively, which implies that the company will able to update business processes and models, allowing operational efficiency to improve where needed and other organisational goals to be achieved with ease.

5.12) **H2: Regulations have Affected Business Models and how Customers are Treated**

In order to contribute further to addressing the research questions of interest, Spearman correlations were performed between selected items included in the questionnaire. In particular, item 1.2 (Regulations Alter How Customers are Treated) correlated positively with item 1.3 (Regulations Alter How the Company Does Business), \( r = .38, p = .002 \), indicating that regulations contribute to adjustments to the running of a business, and may, in turn, have a positive influence on the manner in which consumers are treated. This corresponds with the literature that shows the basis of treating customers fairly is ethical in nature. The basis of this regulation is to protect the customer (Edwards, 2006).
In Table 7 it was found that (see the data for percentage calculation) 41.54% of the respondents agreed that communication was effective within the company. It is seen that upper-management was most likely to agree that communication was effective within the company. Interestingly, support staff was more likely to agree than administrative staff that communication was effective within the company. This can be traced back to clear regulatory goals and business models. In fact, literature shows the core of the operating model is defined through “channels, key resources, and key activities” (Luoma, 2014, p. 20). Therefore, the core operating model is part of value delivery. Customer relationships and key partners may be part of value delivery, but can also be defined as value creation. Communication can be classified as one of these activities.

Therefore, the hypotheses is confirmed: Regulations have affected business models and how customers are treated.

5.13) Conclusion
As a measure of internal consistency, Cronbach’s alpha was computed for the items that were: (1) non-demographic, (2) completed by all the participants (i.e., no exclusions), and (3) measured on the same Likert scale, resulting in Cronbach’s alpha of .63, which may be considered low as compared to established norms (i.e., .70). Considering the low number of items included in this study, Cronbach’s alpha may indicate an acceptable level of internal consistency.

Those employees that have been with their respective companies for 4 to 8 years were most likely to either agree or remain neutral regarding revenue increases due to operational efficiency. Furthermore, the participants in this length of employment range had the most emphatic responses of any of the other groups in relation to revenue increases due to operational efficiency. Although middle management was most likely to remain neutral on this same question, this group was also most likely to either agree or remain neutral as to whether revenue increased due to operational efficiency. It was also seen that upper management had the most varied response from strongly agree to strongly disagree that revenue has increased due to operational efficiency. However, upper management was most likely to either agree or strongly agree that expenses increased in order to achieve operational efficiency. At the same time, middle management was most likely to somewhat agree or remain neutral that expenses were increased to achieve operational efficiency. It was interesting to note that middle management had the only responses stating that they strongly disagreed that
expenses increased. Overall, it was found that 33.85% (see Figure 7) of the respondents agreed that expenses increased in order to achieve operational efficiency.

The study suggests that 47.89% of the respondents felt that regulations affect how the company does business. Over 90% of the respondents agree that there is an effect on business operations due to regulations. It is also seen that middle- and upper-management are most likely to agree that regulations affect how the company does business. However, middle-management had a higher statistical likelihood of agreeing that regulations affect how the company does business. The results show that 47.89% of the respondents agree that regulations alter how the company does business. For example, open-ended regulation has gained momentum quite recently.

The results show that 35.38% of the respondents agree that the company they work for is technologically savvy. At the same time, those in middle- to upper-management were most likely to agree or somewhat agree that the company they work for is technologically savvy. Indeed, 81.84% of the respondents had automated processes in some way. Specifically, 32.69% of the respondents had 24/7 automated processes and 30.77% of the respondents agreed that all departments within their organisation were automatically aware of changes in processes and that changes to the central system were automatic. It was found that middle- and upper-management were most likely to find automation processes to be effective. It was also found that middle- and upper-management had the most varied responses regarding operational automation 24/7, with the majority of respondents agreed somewhat. Yet, middle-management was most likely to strongly agree to this same question. This is important because operational efficiency includes three points: process innovation, the effective use of digital information, and supplier connection (Blakemore, 2006; Goldman et al., 1995; Preiss et al., 1996).

The results show that 58.33% of the respondents feel that their respective companies lose profit due to more time consuming business processes. However, despite these lost profits, an overwhelming majority of the respondents agree that their respective companies have plans to increase technology innovations. It was found that 41.87% of the respondents agree that their respective companies utilise resources effectively. However, it is found, interestingly, that that value creation potential of e-businesses cannot be explained through any one entrepreneurship or strategic management theory.
The results show that 40.00% of the respondents agree somewhat that workflow is effective within the company. This could be related to the ineffectiveness of previous regulations. However, middle management was most likely to only agree somewhat that the workflow is effective within the company. At the same time, upper management was most likely to agree about the effectiveness of the workflow in the company. It was found that 41.54% of the respondents agreed that communication was effective within the company. This can be traced back to clear regulatory goals and business models. In fact, the literature shows that the core of the operating model is defined through “channels, key resources, and key activities” (Luoma, 2014, p. 20). Customer relationships and key partners may be part of value delivery, but can also be defined as value creation. Communication can be classified as one of these activities.
CHAPTER 6: DISCUSSION OF RESULTS

In the previous chapter, the results were presented. The study was designed to determine the effect that regulations have on the insurance industry and treating customers fairly. Moreover, the study seeks to determine the ways that operational efficiency is affected through the increase in regulations. Thus, the purpose of this chapter is to discuss the findings in relation to the literature review.

6.1) Restatement of the Research Questions and Hypotheses

The research questions for this study were causal and included:

1. To what extent have regulations affected operational efficiency?
2. To what extent have regulations affected business models?
3. To what extent have regulations affected how customers are treated?

Based on this information, the researcher hypothesized:

1. According to current employees, underwriting management agencies have achieved high rates of operational efficiency.
2. According to current employees, regulations have affected business models and how customers are treated.

The null hypotheses were:

1. According to current employees, underwriting management agencies have not achieved high rates of operational efficiency.
2. According to current employees, regulations have not affected business models and how customers are treated.

6.2) Demographic Statistics

The researcher found that the gender representation of the sample was 46.16% female and the remaining 53.85% male, suggesting an even split between the genders working within the insurance industry. The researcher also found that the age representation of the sample was 29.23% between 26 and 36 years old, 50.77% between 36 and 46 years old, and 20.00% being 46 years old and older. The researcher determined that the length of employment representation in the sample was 20.00% for 0 to 3 years, 52.31% for 4 to 8 years, 18.46% for 9 to 14 years, and 9.23% for 15 or more years. The researcher found that the company role representation of the sample was 6.16% classified as support staff, 4.62% classified as administrative staff,
9.23% classified as junior management, 36.92% classified as middle management, and 43.08% classified as upper management.

6.3) RQ 1: To What Extent have Regulations Affected Operational Efficiency?

In Chapter 2, it was established that regulations have an effect on operational efficiency. The literature states that regardless of whether or not a company is for-profit or not-for-profit, it needs to be operationally efficient. However, the literature also says that within the financial services industry, operational efficiency can be associated with cost reductions. This requires that banks focus on their core strengths (Littauer, 2011). The chi square test shown in Table 3 shows that the consideration of length of employment in relation to revenue increase due to operational efficiency perceptions was statistically significant because $p = .030$. Since the $p$-value was lower than .05, it is suggested that there are differences between employees with different lengths of employment in terms of whether revenue increased within their respective organisations as a result of operational efficiency. Within the length of employment groups (0 to 3 years, 4 to 8 years, 9 to 14 years, and 15 or more years), the study (Figure 8) found that those employees that have been with their respective company for 4 to 8 years were most likely to be neutral regarding revenue increase due to operational efficiency increases. At the same time, the researcher determined that the same group of people were most likely to agree that revenue increased due to operational efficiency. On the other hand, in Figure 8, it was shown that those employees that have been with their respective company for more than 15 years did not definitely agree that revenue increased due to operational efficiency. In fact, this group had the lowest rate of agreement among all length of employment categories.

However, in Table 4, which depicts the perception of revenue increases as the result of operational efficiency in context of company role, the researcher found that $p = .004$. The results were statistically significant and suggest that there are differences between in company roles regarding whether revenue increased within their respective organisations as a result of operational efficiency. As shown in Figure 9, middle and upper management was most likely to remain neutral regarding operational efficiency leading to revenue increases. At the same time, middle management had an equal number of respondents that definitely agreed or agreed somewhat that operational efficiency led to revenue increases. This same equality of agreed or agreed somewhat also occurred with support staff and junior management. However, as shown in Figure 9, the administrative staff and upper management were the only two groups that voiced disagreement regarding revenue increases due to operational efficiency. However, in
relation to Table 5, the chi square for company role in relation to expense increases as a result of increases in operational efficiency was $p = .017$, which was statistically significant. This suggests that there are differences between company roles regarding whether expenses increased within their respective organisations as a result of operational efficiency. For example, Figure 10 showed that those in upper or middle management were most likely to strongly agree, agree, agree somewhat, or disagree that expenses increased in relation to operational efficiency. In fact, middle management was the only group to definitely disagree to this statement. This could be interpreted that they have a better understanding of the day-to-day activities, as the core functions are performed by middle-management. Therefore, middle management fully comprehend the impact of increased expenditure in relation to operational efficiency.

Overall, Table 4 that 29.23% of the respondents are neutral with reference as to whether or not revenue increases due to operational efficiency. It was established that the majority of the employees agreed that revenue increases as operational efficiency increases. Therefore, it is suggested that operational efficiency is important to the success of the business in terms of earning profits and meeting other organisational goals. It was found through Table 3 that 33.85% of the respondents agreed that expenses increased in order to achieve operational efficiency. However, according to Figure 12, 35.38% of the respondents agree somewhat that management is aware of subordinate activities during the workday. Interestingly, middle- and upper-management equally somewhat agreed that management is aware of subordinate activities during the workday. However, middle-management was most likely to be neutral in this respect. There was a positive correlation found between the effectiveness of management’s awareness of subordinate activities and effectiveness of work flow within the company. This suggests that operational efficiency is not necessarily improved. However, based on the results, employees agree that operational efficiency has improved throughout their organisations. This suggests that operational efficiency is occurring within organisations. On the other hand, due to the impact of regulations, small businesses may not be experiencing the same operational efficiency. It is believed that regulatory compliance takes up a large proportion of small business revenue and that the execution of new regulation causes unexpected and unintended difficulties (Sharp, 1999). In another study by Heenetigala et al. (2011), it was also found that “compliance with corporate regulations for small businesses was in many cases left to accountants due to the difficulties encountered” (Heenetigala et al., 2011, p. 49).
According to the literature, business models and operational efficiency are related. Yet, the business model may be “a statement, a description, a representation, an architecture, a conceptual tool or model, a structural template, a method, a framework, a pattern, and a set” (Zott et al., 2011, p. 1022). However, the term ‘business model’ is an old concept. Most of the time, it is undefined. Despite the lack of definition, interest in business models has grown in the past decade. This can be explained by the “impact of globalization, deregulation, and advances in information and Communication Technologies (ICTs)” (IBM Global Business Services, 2008, p. 139).

The results contradict the literature because expenses were increased in order to achieve operational efficiency. However, this does not consider whether or not these expenses were permanently increased or if they were investment expenses for more efficient operations. Again, considering the literature, it is argued that regulations can inhibit operational efficiency, which can reduce profit or hinder the achievement of established business goals. This can be attributed to insurance companies as well. The revenue increase is confirmed through the literature stating that it can affect operational efficiency. Therefore, it is important to determine how efficient companies are in relation to current regulation requirements. Importantly, there are new business rules that must be understood in order to compete within the global marketplace. This requires the modification of all existing business models. The model applies to numerous aspects of the business, including the use of human capital, supply channels, distribution channels, marketing channels, sales, manufacturing and purchasing, internal control, and innovation, and research and development (Blakemore, 2006). The literature also suggests that the financial market has been influenced by financial de-regulation and re-regulation. It is noted that these two processes have been occurring in developed and developing countries. The goal of deregulation has been to “lower firms’ regulatory costs and foster competition” (Zhao et al., 2010, p. 246). This has been commonly referred to as positive competition, which has led to monopolisation. This suggests that de-regulation and the competition that ensues should “translate into incentives for managers to improve efficiency and performance” (Zhao et al., 2010, p. 246). In contrast, the goal of re-regulation has been to “foster stability and minimize excessive risk taking” (Zhao et al., 2010, p. 246). Re-regulation increases cost and impacts competition, causing efficiency to decrease. There have been controversies regarding “the relevance of corporate governance” on regulation efforts (Zhao et al., 2010, p. 246). Thus, the reality is that regulations have positively affected business models and how customers are treated.
It is argued by many scholars and practitioners that current and future competitiveness can be explained by innovations and structural changes in business models (IBM Global Business Services, 2008; Sanchez & Ricart, 2010b). This innovation and competitiveness makes it increasingly important for management to be aware of subordinate day-to-day activities because if competition becomes too intense, employees may not have the best interests of the business in mind. Through the supervision of supervisors, it is possible to ensure that competition between employees is healthy. Therefore, awareness of the management would assist in improving customer-business relations.

It is argued through microeconomic theory that “deregulation should positively affect the efficiency and productivity of an industry as it reduces the regulatory cost imposed on market participants. In addition, increased competition fostered by deregulation should induce firms to minimize costs to maintain market shares and profitability” (Zhao et al., 2010, p. 247). However, this is only theory. In reality, there have been no definitive studies or evidence that shows that “regulatory changes in the late 1990s have affected the structure, conduct and performance relationship in the financial sector” (Zhao et al., 2010, p. 247). As such, it was expected that these changes would increase incentives for efficiency. According to Awrey et al. (2013), the social costs of market failure cannot be effectively contained through conventional approaches. Therefore, it is concluded that when the law, including regulations, and market do not meet their obligations, culture and ethics can influence the results. In fact, it may be possible to utilise the power of law and markets in order to develop a space within culture and ethics (or through a combination of culture and ethics), which “can play a meaningful role in constraining socially undesirable behavior within the financial services industry” (Awrey et al., 2013, p. 19). As a result, it can be concluded that business model regulations must be culturally acceptable and ethical, simultaneously. However, studies show that further research is needed to determine profitability can be achieved while generating social value through the use of business models in low-income markets (Hart & Prahalad, 2008; Sanchez & Ricart, 2010b). It is also known that business models develop the strategy and logic of the firm, such as operations and value creation for stakeholders (Baden-Fuller et al., 2010; Sanchez & Ricart, 2010b). It is also noted that many business models are based on different theories, including the “industrial organization theory, the resource-based view, dynamic capabilities, and game theory” (Casadesus-Masanell & Ricart, 2010, p. 195). Importantly, it is found that “advances in ICT and the demands of socially motivated enterprises constitute
important sources of recent business model innovations” (Casadesus-Masanell & Ricart, 2010, p. 195).

Furthermore, the literature states that it is necessary for companies to “be more customer-centric, especially since technology has evolved to allow the lower cost provision of information and customer solutions. These developments in turn require businesses to re-evaluate the value propositions they present to customers e in many sectors, the supply side driven logic of the industrial era has become no longer viable” (Teece, 2010, p. 172). This is important because operational efficiency includes three points: process innovation, the effective use of digital information, and the supplier connection (Goldman et al., 1995; Preiss et al., 1996). Innovation is also crucial in this context. This is because innovation allows for economic growth, competition, profitability, and long-term continuity. Thus, “sustainable innovation can be defined as the renewal or improvement of products, services and processes that not only delivers an improved economical performance, but also an enhanced environmental and social performance, in both the short and long term. Its long-term focus, integrated value creation and transformative nature set sustainable innovations apart from conventional innovation” (Bos-Brouwers, 2010, p. 419). It is seen that “the integration of economic, social and environmental aspects sets sustainable innovations apart from conventional innovations: not every innovation is sustainable” (Bos-Brouwers, 2010, p. 419). Bos-Brouwers (2010) further opines that corporate sustainability is important to improve eco-efficiency and increase value creation. In addition, many companies have “formulated sustainable innovation goals, such as targets for cost reduction, energy use and innovative output” (Bos-Brouwers, 2010, p. 428).

The discussion of the above results show that regulations have affected operational efficiency by providing guidelines in relation to innovation, technology advancements, automation of processes, and continuity of services. The results relate back to the importance of the business model, suggesting that the business model has a key integrative role within the company. For instance, there is access for suppliers and customers to the company’s innovation process. Therefore, suppliers and customers are able to provide roadmaps to the company, allowing the company to meet the needs of its customers more effectively (Chesbrough, 2007). It is also important to be aware that the integration of business models and the establishment of a value chain are caused by companies being able to establish an innovation platform of technology. As a result, other companies are invited to invest resources, which further increases the
value of the platform, yet does not require additional investment from the platform-maker (Chesbrough, 2007).

6.4) RQ 2: To What Extent have Regulations Affected Business Models?

In Chapter 2, it was established that regulations have affected business models. Within the literature review, it was found that one study developed a business model that had nine separate dimensions, including customer segments, value proposition, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure (Osterwalder et al., 2010). This led to financial innovation within the real estate industry. Since the real estate industry is closely related to the insurance industry, it is likely that similar models would be effective. Business models are crucial to value creation for the company’s stakeholders. In addition, value creation is, perhaps, the most important driver for the development of the business model. According to this particular study, “the business model depicts the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities” (Amit & Zott, 2001; Ricart & Casadesus-Masanell, 2011). Through this explanation, different business processes are considered, including the exchange of goods or information and the necessary resources and capabilities to conduct the exchange, the different parties within the exchange, how the parties are linked together (such as employee and client), the business operation processes and how the parties interact, and information inflows and outflows (Amit & Zott, 2001; Ricart & Casadesus-Masanell, 2011). Therefore, it can be assumed that business models encompass all different parts of the company, allowing it to operate in one functional process.

According to Figure 13, one age group (36 to 45) agrees more than the others that regulations have altered the company does business. At the same time, those employees that are aged 46 and older were the only group that disagreed in any way that regulations altered how the company does business. Furthermore, it was noted that females were more likely to agree that regulations have had an effect on how companies conduct their business processes. The results in Figure 14 show that 47.89% of the respondents agree that regulations alter how the company does business. In fact, over 90% of the respondents, overall, agree that regulations have an effect on business processes. It is also seen that middle- and upper-management are most likely to agree that regulations affect how the company does business. However, middle-management had a higher statistical likelihood of agreeing that regulations affect how the company does business.
This confirms the literature stating that regulations have an effect on how companies do business. For example, open-ended regulation has gained momentum most recently. In fact, the New Institutional legal endogeneity model notes that “just as much as organizations are affected by legal pressures, so does the state’s legal system gradually assimilate business constructions of what the law entails” (Gilad, 2014, p. 136). This was headed by the TCF initiative, which began due to “recurring scandals of customer abuse by financial firms” (Gilad, 2014, p. 135). Within this initiative, managers need to assume responsibility and treat customers fairly. In fact, an effective mechanism for resolving troubling elements of PPI market practice was increased scrutiny from the competition authorities (Ferran, 2012). Therefore, one effective regulatory method may be greater scrutiny of business operations. However, this has not been entirely successful. In fact, in 2005, the mis-selling of PPI was made an early thematic priority by the FSA. It was noted that self-regulation had not stopped the problem through initial inquiries by the FSA. At the same time, it is believed that technological innovations are crucial to the business model and allows the company to create value in this way (Chesbrough & Rosenbloom, 2002; Luoma, 2014). However, it is also found that technological innovations are not enough to help the company succeed. This requires that innovation “be translated to a value proposition and other functions of a business model” (Luoma, 2014, p. 18). Therefore, it is suggested that regulations should be a pillar that supports business models.

The respondents agree that regulations have affected business models, which corresponds to the literature. This can be traced back to clear regulatory goals and business models. In fact, literature shows the core of the operating model is defined through “channels, key resources, and key activities” (Luoma, 2014, p. 20). It is also discovered that it is important to understand “the existing business model as a starting point of business model development” in order to develop ways to establish the company” (Johnson et al., 2008; Luoma, 2014). The goal of this type of model involves the resolution of a problem and the ability to meet the needs of the customer. The basis of this is value creation. In fact, since it is possible to link value proposition and market segment, value creation is developed. It is possible to link revenue generation, customer segment identification, and financial representation to create value capture. Finally, it is possible to link the definition of the value chain with the “position in the value network to define the value delivery, forming the operational model of a company” (Chesbrough & Rosenbloom, 2002). In this case, “customer value proposition refers to the value creation, whereas profit formula, key resources and key
processes define the value delivery” (Johnson et al., 2008; Luoma, 2014, p. 18). Thus, according to this model, “(1) customer value proposition includes the target customer, job to be done and offering that satisfies the job to be done. (2) Profit formula defines how the company creates value for itself. It is the blueprint of the financial aspects of the business model, including revenue model, cost structure, margin model and resource velocity. (3) Key resources include resources required to deliver the customer value proposition, such as people, technology, equipment, channels and partnerships. Finally, (4) key processes together with key resources define how the value is delivered. They include processes as well as rules, metrics and norms” (Johnson et al., 2008; Luoma, 2014, p. 18). Therefore, the core operating model is part of value delivery. Customer relationships and key partners may be part of value delivery, but can also be defined as value creation. As a result, it is seen that “some of the activities and resources needed in a company’s operating model can be outsourced. On the other hand, value created in networks can link it to value creation elements” (Nenonen & Storbacka, 2010). Value is captured through revenue streams and cost structures (Luoma, 2014). Communication can be classified as one of these activities. For example: Item 1.8 (Effectiveness of Communication Within the Company) correlated positively with item 1.7 (Effectiveness of Work Flow Within the Company), $r = .52, p < .001$. Therefore, it is suggested that as effective communication increases, there are superior levels of work flow effectiveness within the organisation. At the same time, there was no correlation between automation and any processes within the organisations. As such, process automation does not necessarily correspond to superior work flow levels. Thus, it may be that despite attempts to introduce technology to improve the process flow through automation, it seems to have little influence on the intended outcome of improving the effectiveness of the work flow in the organisation.

6.7) RQ3: To What Extent have Regulations Affected how Customers are Treated?

In Chapter 2, it was established that regulations have affected how customers are treated. The literature found that the treating customers fairly regulation ensures that regulated financial institutions meet specific fairness outcomes. TCF forces these companies to consider their customers at different levels of the company-customer relationship, including product design, marketing, point-of-sale, and after-sale. Thus, companies are required to prove that customers are treated fairly (FSB, 2011a). Furthermore, the initiative addressed several issues, such as “employees’ remuneration and the design of financial products” (Gilad, 2014, p. 135). Originally, this initiative was not taken seriously. However, in time, more elaborate structures were
introduced by companies regarding customer treatment monitoring. However, there were little changes made to processes and practices. As such, customer feedback was considered in commercial businesses, especially through enhancing customer satisfaction, loyalty, and advocacy. Thus, according to the FSA, companies need to show that the structures make a difference for customers and that objective fair treatment cannot be measured through feedback and satisfaction indicators. This caused many companies to include components that assessed “customers’ understanding of their financial transactions” (Gilad, 2014, p. 136). Thus, prior to complying with the TCF, companies engaged in opportunistic behaviour. In fact, “business relationships are often structured in highly complex ways not represented by simple vertical integration” (Klein et al., 1978, p. 298). However, it is noted that regulations have an effect on bank performance. Significantly, it is suggested through one study “that corruption increases the cost-efficiency and net-interest margins while an improvement in the law and order variable decreases the cost efficiency without affecting performance” (Naceur & Omran, 2011, p. 2).

According to Figure 16, females were more likely to definitely agree that their company was technology savvy. On the other hand, males were most likely to agree somewhat that their company was technology savvy, suggesting that females had a slightly stronger belief of company-wide technological savviness. Interestingly, despite the tendency of females to agree to their company being technology savvy, males were most likely to strongly agree to the same statement. Significantly, only females remained neutral to this statement. As shown in Table 6, a chi-square test of independence was conducted to determine whether the perceptions of technological savviness depended on the company as a whole. The chi-square test of independence was statistically significant at \( p = .021 \), because \( p \) was less than .05. The results in Figure 17 show that 35.38% of the respondents agree that the company they work for is technologically savvy. However, it is also noted that 12.31% of the employees disagreed that their company is technology savvy. At the same time, Figure 18 suggests that over 80% of the respondents agreed that regulations affect how customers were treated.

However, value proposition is also important for positive customer treatment. Yet, the literature also suggests that the basis of treating customers fairly is ethical in nature. The basis of this regulation is to protect customers (Edwards, 2006). According to one study, it is noted that no single approach alone can be utilised within the financial services sector due to the size and diversity of the market. Therefore, the study by
Akinbami (2011) was designed to focus on the different ways that consumer protection was initiated in the UK, particularly after the financial crisis. The study was conducted through the analysis of literature regarding behavioural economics and psychology, allowing for the critical analysis of the UK’s supervision of financial firms. Ultimately, it was found that “non-interventionist approaches to consumer protection, which are based on the traditional theories of the law and economics movement, have failed. As a result, there is now a shift in thinking towards more interventionist approaches” (Akinbami, 2011, p. 134).

6.6) H1: Underwriting Managers have Achieved High Rates of Operational Efficiency

Through the evidence proposed in Chapter 2, it is suggested that underwriting managers have achieved high rates of operational efficiency. The TCF initiative enhances operational efficiency. According to the literature, the TCF measure is gaining momentum in the business world all around the globe. This measure “aims to stimulate the self-regulatory capacity of the regulated population to advance socially desirable goals – in this particular case, fair treatment for customers” (Georgosouli, 2011, p. 405). Therefore, companies must engage in “self-evaluation, design, and management of their operations and internal governance and controls” in order to ensure customers are treated fairly and consumer protection exists” (Georgosouli, 2011, p. 411). Ultimately, “TCF is an outcomes-based regulatory and supervisory approach designed to ensure that specific, clearly articulated fairness outcomes for financial services consumers are delivered by regulated financial firms” (27four Investment Managers, 2014). In fact, 24four Investment Managers (Pty.) Ltd. has a different approach to TCF. For instance, the company focuses on leadership, strategy, decision making, governance and control, performance management, and rewards. This is done by the Board and management working together to provide direction for the company, as well as ensuring that TCF behaviours and outcomes are delivered efficiently. TCF aims are not only considered to be solely company vision and values. In fact, TCF aims are “built into the company’s strategic and business plans” (27four Investment Managers, 2014). The goal of the decision-making protocols and governance structures were to ensure that all decisions made reflected the TCF strategy. The policies in place are “designed to cater for TCF considerations and include TCF measurement systems and identification of TCF risks” (27four Investment Managers, 2014). This allows performance management to occur.
As shown in Figure 26, the results show that 58.33% of the respondents feel that their respective companies lose profit due to more time consuming business processes, such as compliance with regulations. According to Figure 27, those employees with their companies for 4 to 8 years agree that their company loses profit due to more time consuming business processes. This same group is most likely to agree somewhat to the same question. Interestingly, none in this group definitely agreed that their company lost profit due to more time consuming business processes. However, as shown in Figure 25, despite these lost profits, an overwhelming majority of the respondents agree that their respective companies have plans to increase technology innovations. The data in Table 7 shows those between 36 and 45 were most likely to definitely or somewhat agree that the work flow in the company is effective. Furthermore, the company role chi-square test (Table 8) is significant for company role perceptions and whether work flow was effective in achieving operational efficiency. At the same time, as shown in Figure 26, middle-management was most likely to agree somewhat regarding the effectiveness of the work flow within the company. However, upper-management was most likely to definitively agree on the effectiveness of the work flow within the company. However, there was no correlation between the automation of any process and the effectiveness of work flow within the company.

Based on this finding, it may be that the automation of processes does not automatically correspond to superior levels of work flow within the organisation. Thus, it may be that despite attempts to introduce technology to improve the process flow through automation, it seems to have little influence on the intended outcome of improving the effectiveness of the work flow in the organisation. For the company, this means that it will be able to manage work flows more effectively, which implies that the company will be able to update business processes and models, allowing operational efficiency to improve where needed and other organisational goals to be achieved with ease. It was found in Figure 27 that 41.87% of the respondents agree that their respective companies utilize resources effectively. The results found in Figure 27 show that over 80.00% of the respondents agree that work flow is effective within the company.

However, despite these lost profits, the overwhelming majority of the respondents agree that their respective companies have plans to increase technology innovations. This is important because value can be created through new ways of enabling transactions. Thus, the developed business model established that value creation can be attributed to four inter-dependent factors: “efficiency, complementarities, lock-in, and novelty” (Amit & Zott, 2001, p. 493). However, it is found, interestingly, that that the
value creation potential of e-businesses cannot be explained through any one entrepreneurship or strategic management theory. In fact, “a business model depicts the design of transaction content, structure, and governance so as to create value through the exploitation of business opportunities,” suggesting that the business model is rooted in innovation and is a source of value creation” (Casadesus-Masanell & Ricart, 2010, p. 197).

Despite this information, the hypothesis:

H1: Underwriting managers have achieved high rates of operational efficiency is not confirmed.

Rather, the null hypothesis that underwriting managers have not achieved high rates of operational efficiency is confirmed.

Thus, according to this study, despite the expectations that the TCF initiative has increased operational efficiency opportunities, underwriting managers have not achieved high rates of operational efficiency at this time, which suggests that a variety of business models and regulations to improve operational efficiency are required. The UMA business model will require an revolutionary change where the insurer will need to serve as the back office function, to the UMA performing all administration and regulatory tasks. This will assist the UMA to continue it sales and to provide specialist advice. At the same time the insurer will be able to leverage on its economy of scale and provide this function at a reduced cost. This will provide scale and efficiency.

6.8) H2: Regulations have Affected Business Model and how Customers are Treated

Through the evidence proposed in Chapter 2, it is suggested that regulations have influenced business models and how customers are treated. The literature review shows that the basis of regulations contribute to adjustments to the running of a business and may, in turn, have a positive on the manner in which consumers are treated. Thus, treating customers fairly is ethical in nature. The basis of this regulation is to protect the customer (Edwards, 2006). According to Edward (2006), it is noted that no single approach can be utilised within the financial services sector due to the size and diversity of the market. Thus, a checklist approach to TCF would not be appropriate since ‘fairness’ is classified as being flexible. Rather, a principle approach to TCF is more appropriate because it allows senior members of management to determine what ‘fairness’ means in terms of the individual company. This allows the
company to determine where ‘fairness’ is not being accomplished (Briault, 2005; Edwards, 2006). There are difficulties, however, that occur when the FSA attempts to explain what TCF means. Thus, some argue that TCF is focused on cultural change. Therefore, the FSA has labelled TCF as being an ethical framework for financial services. As a result, FSA has accepted numerous complexities that are involved in cultural changes. FSA may assist those companies that wish to adopt these changes, which may spark a wider debate regarding “an ethical approach to financial services” (Edwards, 2006, p. 242). As a result, it is concluded that the hypothesis is confirmed:

H2: Regulations have affected business models and how customers are treated.

The survey results revealed that 41.54% Table 8 of the respondents agreed that communication was effective within the company. Thus, it was found that there is a strong correlation between the way that regulations alter how customers are treated and how the company does business, including communication styles and the effectiveness of work flows. It is seen that upper-management was most likely to agree that communication was effective within the company. Interestingly, support staff was more likely to agree than administrative staff that communication was effective within the company. This may suggest that the more management is aware and knowledgeable about the activities of subordinates, the more effective the management of the work flow is. This appears to signify that greater levels of effective communication relate to superior levels of work flow effectiveness within the organisation. This is shown in this study through the positive correlation between the effectiveness of communication and work flow in the company.

However, work flow may be influenced by automation. Based on this finding, it may be that the automation of processes does not automatically correspond to superior levels of work flow within the organisation. Thus, it may be that despite attempts to introduce technology to improve the process flow through automation, it seems to have little influence on the intended outcome of improving the effectiveness of the work flow in the organisation.

6.9) Conclusion

In conclusion, the first research question considers the extent of regulation effects on operational efficiency. The results of the research study suggest that there significant effect of regulation on operational efficiency. However, there is no conclusive
determination as to the exact extent of regulation requirements on operational efficiency. The second research question considers the extent that regulations affect business models. It is uniformly agreed that regulation affect how the company does business, thus requiring business model adaption. The third research question considers the extent that regulations affect how customers are treated. The results show that regulations have a strong impact on how customers are treated due to changes in operational efficiency and business models. The first hypothesis suggests that underwriting managers have achieved high levels of operational efficiency. According to the results, it was found that underwriting managers have not achieved high levels of operational efficiency. The second hypothesis suggests that regulations have affected business models and how customers are treated. According to the results, it has been suggested that regulations have affected business models and how customers are treated.
CHAPTER 7: CONCLUSION

The purpose of this chapter is to highlight the major findings from the study, to provide recommendations for stakeholders based on the findings, and outline recommendations for future research.

7.1) Principal Findings

Overall, the study showed that regulations have affected operational efficiency. This effect is especially negative for small businesses such as many UMAs who are focused on earning a profit. Due to the small size of these organizations, complying with regulatory requirements becomes an onerous activity. However, some countries, such as Australia, are finding ways to work with current regulations to benefit small businesses. For example, the small businesses in this country are assisted through governmental agencies in order to “enhance their efficiency and contribution to the local economy” (Heenetigala et al., 2011, p. 43). At the same time, the literature suggests that insurers will need to consolidate UMAs in order to provide scale and efficiency, especially considering that insurance companies would focus on regulation requirements. Thus, within the insurance company, UMAs would be enabled to continue increasing profitability.

For example, 33.85% of the respondents agreed that expenses increased in order to achieve operational efficiency. At the same time, upper management was most likely to agree that expenses increased in order to achieve operational efficiency. Upper management was the only group that strongly agreed that revenue increased due to operational efficiency. This corresponds with the literature, stating that regardless of whether or not the company is for-profit or not-for-profit, it needs to be operationally efficient. This revenue increase confirms the literature, stating that regulation changes can affect operational efficiency. The study found that 81.84% of the respondents had automated processes in some way within their organisations. Furthermore, 32.69% of the respondents had 24/7 automation for processes and 30.77% of the respondents agreed that all departments within their organisation were automatically aware of changes in processes and that changes to the central system were automatic. The results show that 47.69% of the respondents agree that regulations affect how customers are treated. The results in this study also show that junior-, middle-, and upper-management were most likely to agree that regulations affect how customers are treated. This aligns with the literature, which finds that the TCF regulation ensures that regulated financial institutions meet specific fairness outcomes. The respondents in the
study emphasise that there has been a positive effect on the manner in which customers are treated due to increased regulations. This relates even more to the literature, considering that, according to the FSB, the TCF regulation ensures that regulated financial institutions meet specific fairness outcomes.

Approximately 58.33% of the respondents feel that their respective companies lose profit due to more time consuming business processes. This suggests that operational efficiency is not being achieved. However, despite these lost profits, the overwhelming majority of the respondents agree that their respective companies have plans to increase technology innovations. Thus, the developed business model established that value creation can be attributed to four inter-dependent factors: “efficiency, complementarities, lock-in, and novelty” (Amit & Zott, 2001, p. 493). In fact, literature shows the core of the operating model is defined through “channels, key resources, and key activities” (Luoma, 2014). Customer relationships and key partners may be part of value delivery, but can also be defined as value creation. However, only 35.38% of the respondents agree somewhat that management is aware of subordinate activities during the workday, suggesting potential discord throughout the organisation. Significantly, upper and junior management were most likely to note subordinate activities, while middle management was neutral. Based on the trend of 70% of the responses, this suggests that operational efficiency is occurring within organisations. The results show that 40.00% of the respondents agree somewhat that workflow is effective within the company. The respondents agree that regulations have affected business models, which corresponds to the literature. The basis of this is value creation. In fact, since it is possible to link value proposition and market segment, value creation is developed. It is possible to link revenue generation, customer segment identification, and financial representation to create value capture. Finally, it is possible to link the definition of the value chain with the “position in the value network to define the value delivery, forming the operational model of a company” (Luoma, 2014, p. 20).

The results show that regulations have affected operational efficiency by providing guidelines in relation to innovation, technology advancements, automation of processes, and continuity of services. The results relate back to the importance of the business model, suggesting that the business model has a key integrative role within the company.
7.2) Implication for Management

It is important to determine how efficient companies are in relation to current regulation requirements. This requires the modification of all existing business models. The model applies to numerous aspects of the business, including the use of human capital, customers, distribution channels, strategies, infrastructure, purchasing, organisational structures, innovation and research and development (Blakemore, 2006; George & Bock, 2011). The importance of operational efficiency caused by technological savviness aligns with existing literature indicating that since customers have more choices, a variety of needs can be expressed and resolved, which allows supply alternatives to become transparent. As such, it is necessary for companies to “be more customer-centric, especially since technology has evolved to allow the lower cost provision of information and customer solutions. These developments in turn require businesses to re-evaluate the value propositions they present to customers e in many sectors, the supply side driven logic of the industrial era has become no longer viable” (Teece, 2010, p. 172). With the TCF initiative, companies have to consider their customers and the resultant relationship at all levels of the company. As a result, the TCF initiative results in the requirement of proof that customers are treated fairly (FSB, 2011a). There are difficulties, however, that occur when the FSA attempts to explain what TCF means. Thus, some argue that TCF is focused on cultural change. Therefore, the FSA has labelled TCF as being an ethical framework for financial services. As a result, the FSA has accepted numerous complexities that are involved in cultural changes. The FSA may assist those companies that wish to adopt these changes, which may spark a wider debate regarding “an ethical approach to financial services” (Edwards, 2006, p. 242). However, value proposition is also important to positive customer treatment. Yet, the literature also suggests that the basis of treating customers fairly is ethical in nature. The basis of this regulation is to protect the customer (Edwards, 2006). TCF forces these companies to consider their customers at different levels of the company-customer relationship, including product design, marketing, point-of-sale, and after-sale. The basis of this regulation is to protect the customer (Edwards, 2006). Operational efficiency is enhanced through the TCF initiative, which has gained momentum all over the world.

According to the literature, business models and operational efficiency are related. Yet, business models have grown, which is explained by the “impact of globalization, deregulation, and advances in information and Communication Technologies (ICTs)” (Sanchez & Ricart, 2010a, p. 2). Thus, it is argued by many scholars and practitioners that current and future competitiveness can be explained by innovations and structural
changes in business models (Sanchez & Ricart, 2010a). This innovation and competitiveness makes it increasingly important for management to be aware of subordinate day-to-day activities. Therefore, management awareness would assist in improving customer/business relations. For instance, there is access for suppliers and customers to the company's innovation process. Therefore, suppliers and customers are able to provide roadmaps to the company, allowing the company to meet the needs of its customers more effectively (Chesbrough, 2007). Regulations can contribute to how the business is run, which can influence customer treatment, and shows that this regulation helps to protect the customer (Edwards, 2006). It is argued, through microeconomic theory, that “deregulation should positively affect the efficiency and productivity of an industry as it reduces the regulatory cost imposed on market participants. In addition, increased competition fostered by deregulation should induce firms to minimize costs to maintain market shares and profitability” (Zhao et al., 2010, p. 247). However, the market is so diverse that no one approach can be utilised to establish TCF. As a result, the establishment of regulation as a pillar within the business model helps companies to plan for the changing regulations and adapt their models for these regulatory changes.

7.3) Limitations of Research

There are distinct limitations to this line of research. For example, but not limited to:

- Future studies may find themselves limited with a quantitative method study. Therefore, these researchers may be better served through using a mixed methods or qualitative designs in order to develop an exploratory study and increase understanding within the industry.

- Furthermore, emphasis needs to be placed on the senior manager in order to analyse perceived value within the industry. At the same time, this provides credence to a limitation of analysing perception, which may not be interpreted accurately by the researcher or intimated accurately by the participants. This is because they have greater responsibility across the company, which also may mean that they have been with the company for the longest period of time. Thus, they may have more experience, which can increase their viewpoint in relation to different situations. As a result, the regulator that reads this study may obtain more value from determining the viewpoint of senior managers.

- For this specific study, 68 people responded out of 100 requests. Those that did not respond were not known to the researcher. Therefore, the lack of personal
knowledge could have limited the results, as the information from these respondents may have been significant in the context of the study.

- Since the respondents were asked for their perceptions, the results could be impacted or even biased based on these individual perceptions.
- Finally, the study is limited in that it is difficult, if not impossible, to obtain financial value as to whether or not regulations have affected operational efficiency, either negatively or positively, especially in financial services.

7.4) Suggestions for Future Research

Future researchers would do well to consider the viewpoint of senior management alone. This is because the differing managerial hierarchies affect the outcome of the study. Therefore, it is suggested that through the use of the same hierarchy and those with the same responsibilities across their respective companies, a more accurate comparison can be made regarding industry expectations. Other studies may want to focus solely on lower employees, such as junior or middle management. This may be useful in order to see the comparison of viewpoints.

One study developed a business model that had nine separate dimensions: customer segments, value proposition, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure (Osterwalder et al., 2010). Business models such as these are beneficial to the organisation in that they focus on a variety of impacts to the business. Operational efficiency includes three points: innovation, the effective use of digital information, and supplier connection (Goldman et al., 1995; Preiss et al., 1996). The findings from this study suggest that the automation of processes does not automatically correspond to superior levels of work flow within the organisation. Thus, it may be that despite attempts to introduce technology to improve the process flow through automation, it seems to have little influence on the intended outcome of improving the effectiveness of work flow in the organisation.

This information all suggests that further research needs to be conducted regarding the effectiveness of different business models. In fact, considering the nine propositions established by Osterwalder et al. (2010), it is suggested that each of these propositions be analysed with different business models in different industries in order to ascertain what proposition has the greatest impact on different business models. Since Amit and Zott (2001) emphasise the use of value creation, specifically in relation to “efficiency, complementarities, lock-in, and novelty” (p. 493), it is important to see how each of the
factors affect business models. Research suggests that at least one of the propositions identified must be included in the business model in order for it to be effective. Therefore, it would be beneficial for future researchers to ascertain which proposition is the most effective in different industries.

This study shows that a business model may:

- Be a reflection of a firm’s strategic choice (Shafer et al., 2005),
- Be a conceptualization of transactional links between a firm and exchange partners (Zott & Amit, 2008) and governance of transactions (Amit & Zott, 2001) designed to create value (Chesbrough, 2007),
- Unites the finer aspects of strategy (Hedman & Kalling, 2003),
- Define the organisation’s logic (Linder & Cantrell, 2000) and mind-sets (Linder & Cantrell, 2007),
- Include a contingency model (Mansfield & Fourie, 2004) of an interrelated set of decision variables (Morris et al., 2005), and
- Be along a value constellation (Schweizer, 2005) to identify the “who, what, when, why, how and how much” elements (Mitchell & Coles, 2003, p. 16).

Therefore, research on definitive definitions for business models may be beneficial in the future. Finally, future studies on the underwriting managers should be global, especially within different stages of the life cycle and maturity levels, in order to assess how other organisations have dealt with regulatory requirements.
References


Resource Pro. (2014). The need for top insurance talent grows as industry ages.


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APPENDIX A: Consent Form

The purpose of this research project is to analyze the impact that regulation has on operational efficiency and treating customers fairly. This is a research project being conducted by Ismail E Ismail at GIBS University. You are invited to participate in this research project because you are currently working at an underwriting manager (UMA).

Your participation in this research study is voluntary. You may choose not to participate. If you decide to participate in this research survey, you may withdraw at any time. If you decide not to participate in this study or if you withdraw from participating at any time, you will not be penalized.

The procedure involves filling in an online survey that will take approximately 15 minutes. Your responses will be confidential and we do not collect identifying information such as your name, email address or IP address. The survey questions will be about the impact that regulation has on operational efficiency.

We wish to assure you that your information will be kept confidential. All data is stored in a password protected electronic format. To help protect your confidentiality, the surveys will not contain information that will personally identify you - which means the personal information will be "de-identified" as prescribed in the Protection of Personal Information Act, No 4 of 2013. De-identify', in relation to personal information of a data subject, means to delete any information that – a) identifies the subject b) can be used or manipulated by a reasonably foreseeable method to identify the data subject , or c) can be linked by a reasonably foreseeable method to other information that identifies the data subject and de-identified has the corresponding meaning. The results of this study will be used for scholarly purposes only and may be shared with GIBS University representatives.

If you have any questions about the research study, please contact Ismail E Ismail. This research has been reviewed according to GIBS University IRB procedures for research involving human subjects.

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APPENDIX B: Questionnaire

Likert Scale 1 – 7:
1 – Strongly Agree
2 – Agree
3 – Agree Somewhat
4 – Neutral
5 – Disagree Somewhat
6 – Disagree
7 – Strongly Disagree

1.1) On a scale of 1-7, do you use automation with any of your processes? If yes, please answer the following:
   A. On a scale of 1-7, is your automation operational 24/7 for consistency and continuity?
   B. On a scale of 1-7, do all departments become automatically aware (through automation) of changes in processes (such as new orders, etc.)?
   C. On a scale of 1-7, are changes automatically updated in the central system?

If no, please answer the following:
   A. On a scale of 1-7, does your company lose profit due to more time-consuming business processes?
   B. On a scale of 1-7, does the company have plans to increase technology innovations?
   C. On a scale of 1-7, is the company using its resources effectively?

1.2) On a scale of 1-7, do regulations alter how customers are treated?

1.3) On a scale of 1-7, do regulations alter how the company does business?

1.4) On a scale of 1-7, have the company’s expenses increased in order to achieve operational efficiency?

1.5) On a scale of 1-7, has the company’s revenue increased as the result of operational efficiency?

1.6) On a scale of 1-7, how aware is management of subordinate activities during the workday?

1.7) On a scale of 1-7, how effective is the work flow within the company?
1.8) On a scale of 1-7, how effective is communication within the company?

1.9) On a scale of 1-7, how technologically-savvy is the company as a whole?

Demographic Questionnaire

2.1) Are you male or female?
   A. Male
   B. Female

2.2) What is your age?
   A. 25 or under
   B. 26-35
   C. 36-45
   D. 46 and older

2.3) How long have you worked at the company?
   A. 0 – 3 years
   B. 4 – 8 years
   C. 9 – 14 years
   D. 15 years +

2.4) Which of the following best describes your role within the company?
   A. Support staff
   B. Administrative staff
   C. Junior management
   D. Middle management
   E. Upper management
Dear [Name]

Protocol Number: Temp2015-01381

Title: Business Model Regulatory Impact on Efficiency and Treating Customers Fairly

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

You are therefore allowed to continue collecting your data.

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

Kind Regards,

GIBS Ethics Administrator