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Faculty of Business Economics

Master of Management

Master's thesis

What are factors that enabling or discouraging disruptive innovation in the insurance industry in Mauritius?

Uyen Vu Thi Duong

Thesis presented in fulfillment of the requirements for the degree of Master of Management, specialization International Marketing Strategy

SUPERVISOR :
Prof. dr. Allard VAN RIEL

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PREFACE

My sincere gratitude, firstly, goes to my supervisor, Professor Dr. Allard Van Riel. Despite the fact that I have been writing my thesis from Mauritius, he has always made himself available to help me during this process. He inspired me with valuable suggestions, insightful criticisms and great patience throughout this entire process. His expertise helped me improve the depth of my thesis. I also would like to extend my gratitude to Professor Dr. Piet Pauwels for his early guidance.

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My deepest gratitude goes towards to my husband, my parents and my son. They have always inspired me, trusted me endlessly and supported me during the ups and downs of my life. Without their help and encouragement, I would not be able to reach this far.

I dedicate this thesis to my son, Julian Emmanuel Vu Dian - innovator and disruptor!

SUMMARY

Since the inception of the theory of disruption in 1997, many events and transformations have occurred across many industries. New sets of data have become available to the extent that the author of the theory had to revisit his original work and refine the theory. For instance, the hotel industry, which was initially considered as an anomaly for being resistant to disruption, became the subject of disruption after the rise of Airbnb (Christensen, McDonald, Altman & Palmer, 2016). Likewise, there are other industries, markets, regions that have received little attention from academic scholars and for which little data is available. This state of affairs gives a sense that our understanding of the theory may still be incomplete or else further refinement is needed. The theory of disruptive innovation was based on a study of big markets and certain established industries predominantly found in the United States. Little is known about disruption in other regions and smaller markets.

The aim of this dissertation is to understand what are the factors that enable or inhibit disruptive innovation in the insurance industry in Mauritius. Just like the hotel industry, the insurance industry was, for a long time, thought to be very traditional and resistant to change – that fact is not so certain now. Mauritius, unlike the United States, is a very small country and its insurance industry is a tiny fraction of that of the US. Since all disruptive innovations are not the same, this study is important to further our understanding of the forces behind disruption and the disruption itself in an industry and a place which have been understudied.

The research approach adopted in this dissertation includes a review of the relevant literature, use of a preliminary conceptual framework and multiple case studies. The data for this research was collected through in-depth interviews of managers from four insurance companies in Mauritius. The findings from the interviews have then been organised thematically to present the analysis of the case studies and the cross-case analysis.

The key findings in this thesis indicate that the Mauritian insurers, with the exception of Quantum Insurance, rely on an intermediated business model for the sale of insurance products. It was also found that competition in the insurance market in Mauritius is mostly price driven and that

customers in Mauritius, although price sensitive, are not yet accustomed to online purchase of insurance products. Heavy regulations were flagged as high barriers to entry in the insurance market. There are also enormous challenges for a new company trying to enter the insurance market primarily because of the capital requirements and the difficulty for start-ups to raise capital. Another finding was that there is a high cost in operating an insurance company especially because local companies have to resort to skilled foreign labour to develop and implement new technologies and insurance products. Last but not least, it was found that the big insurance companies have a top-down decision process and that key strategic decisions are also tied to the conglomerate to which they belong.

The main conclusions drawn from this study are that -

1. there is an ongoing process of disruptive innovation in the insurance market in Mauritius but that process has not matured into disruption yet. That process has not caused significant changes in the market share of the incumbents;
2. the application and adoption of new technologies, demographic change, key strategies, a disintermediated business model and low pricing are the key enablers of disruptive innovation;
3. the difficulty for new entrants to raise capital, heavy regulations, the small market size, the traditional organisational structure and the persistent customer behaviour have been found to be among the factors that hinder disruptive innovation; and
4. the small market size for insurance is more favourable for sustaining innovation rather than disruptive innovation.

This thesis recommends that -

1. the insurers should invest in ongoing training for the senior managers so that the latter could be more exposed to new technologies and understand their use cases;
2. In cases where insurance companies are part of conglomerates, it is recommended that there should be substantial autonomy and enlarged participation in the decision-making process within the subsidiary insurance company; and

3. the established insurance companies should focus on what they excel at rather than destroying or replacing current profitable business models.
4. Instead of setting up ‘separate business units’, the insurance companies should invest in new start-ups since this would be a better way to foster innovation and reap the benefits of a successful disruptive change while breaking the cycle of low investment, poor local skills, poor innovation and persistent consumer behaviour.

While this study has its own limitations, it has sought to bring a fresh perspective on the process of disruption, an understanding of the dynamics of disruption in a relatively small market and their implications.

CHAPTER 1 INTRODUCTION AND PROBLEM STATEMENT

1.1 Introduction

According to the Global Fintech Survey (2016), 74% of insurers held the view that the insurance industry is going to be disrupted within the next five years. The insurance industry has traditionally lagged behind in terms of innovation (Nicoletti, 2016, p.7). Now, it is faced with the challenges posed by the sharing economy and new technologies like artificial intelligence and blockchain.

1.2 Problem statement

In 1997, Christensen laid down that paradoxical question that would end up having a profound effect in the field of management and in the business community at large - “why do great companies fail?”.

Christensen’s answer to that question was the theory of disruptive innovation. The words “disruptive innovation” or “disruption” have since become buzzwords. Unfortunately, those words have often been applied in the wrong context and the core concepts of the theory of disruption are still broadly misunderstood. (Christensen, Raynor & McDonald, 2015).

Numerous studies have also examined the theory of disruption (Danneels, 2004; Markides, 2006; Chase, 2016; Schmidt & Druehl, 2008). However, the manifestations of that phenomenon in some regions like South America, Africa or the Middle East have remained understudied. Like Christensen, many authors have indeed focussed on disruptive innovation, in certain industries, based on certain case studies, mostly in the North American and European markets where there are large and established industries (Christensen, 1997; Charitou & Markides, 2003; Charitou, 2001)

Authors like Markides (2006), have argued that not all disruptive innovations are the same and it is a grave mistake to treat all disruptive innovations as same. This fact may have significant implications for our understanding of the phenomenon and future research. According to Christensen, Raynor and McDonald (2015), “universally effective responses” to disruption have also not yet been identified and the latter are keen to enlarge and refine the theory of disruptive innovation.

Given this state of affairs, there is a genuine need to further our understanding of the dynamics of disruption and the underlying factors that impact upon disruptive innovation in different industries, regions and markets.

1.3 Research questions

The purpose of this thesis is to find out what are the factors behind disruptive innovation in a relatively small market, small industry and small country which have so far received little attention from scholars. The industry is the insurance industry and the country is Mauritius. This thesis will attempt to answer the following research questions -

1. Is there disruptive innovation in the insurance industry in Mauritius?
2. What are factors enabling disruptive innovation in the insurance industry in Mauritius?
3. What are factors discouraging disruptive innovation in the insurance industry in Mauritius?

1.4 Outline of the thesis

In the next chapter (Chapter 2), there will be a literature review on the theory of disruption by Christensen, its evolution and criticisms, and an overview of the insurance industry in Mauritius. Eventually, a preliminary conceptual framework will be constructed. Chapter 3 will provide the methodology for the qualitative research. Chapter 4 concerns the findings from the multiple case studies. Finally, Chapter 5 will contain the discussion based on the findings, a proposed theoretical framework, managerial implications, limitations and future research recommendations.

CHAPTER 2 LITERATURE REVIEW

2.1 Disruptive innovation theory by Christensen

2.1.1 Definition

In a seminal paper in 1942, Joseph Schumpeter used the term "*creative destruction*" to describe how capitalism is a form of economic change, as it is dynamic and can never be static. He further argued that economic change cannot sufficiently be explained by mere reference to changes in social and natural environment including wars and revolutions. Instead, he described the process of "*creative destruction*" as change being caused by new products, new markets, new consumers and new forms of production and new industries. According to Schumpeter (1942, p.82), such a process of mutation will destroy an old economic structure and create a new structure.

Fifty-three years later, i.e. in 1995, the term "*disruptive innovation*" was first introduced in an article by Clayton Christensen and Joseph L. Bower. Clayton Christensen used the term again in a book entitled "*The Innovator's Dilemma*". In the preface of the second edition of Innovator's Dilemma (2003, p.x), Christensen wrote that "*Incidentally, another scholar [...], Michael Raynor of Deloitte Research, has noted that disruptive technology is probably the cause behind "creative destruction" that economist Joseph Schumpeter observed to be the primary engine of economic progress more than half a century ago. I think Michael is right*." The statement from Christensen proved the importance of the theory of disruption and the potential explanation as the force behind "*creative destruction*".

According to Christensen, Raynor and McDonald (2015, p.4) "disruption" is a process whereby established businesses are challenged by a smaller company with less resources. In essence, the "disruptive innovation" theory can be understood as follows:

a) An incumbent company with a significant market share has a product/service that it keeps improving beyond the need of its customers;

b) Whilst the incumbent company focuses on improving its products and services, a new firm enters the lower tier, and often ignored segment, of the market to introduce a low-end product or service, i.e., of inferior quality or price, or less complex;

c) The incumbent company ignores, or does not respond strongly to the new entrant because

    i. it does not see the latter as a threat or direct competition;

    ii. it is busy improving its profitability for its existing product or service in the higher end of the market; or

    iii. its structure does not allow it to respond to the new entrants;

d) The new entrant keeps improving its product or service and moves that product or service to the mainstream market.

e) When the mainstream customers start to massively adopt the new entrant's offer, disruption takes place. The new entrant displaces the incumbent company from the dominant position.

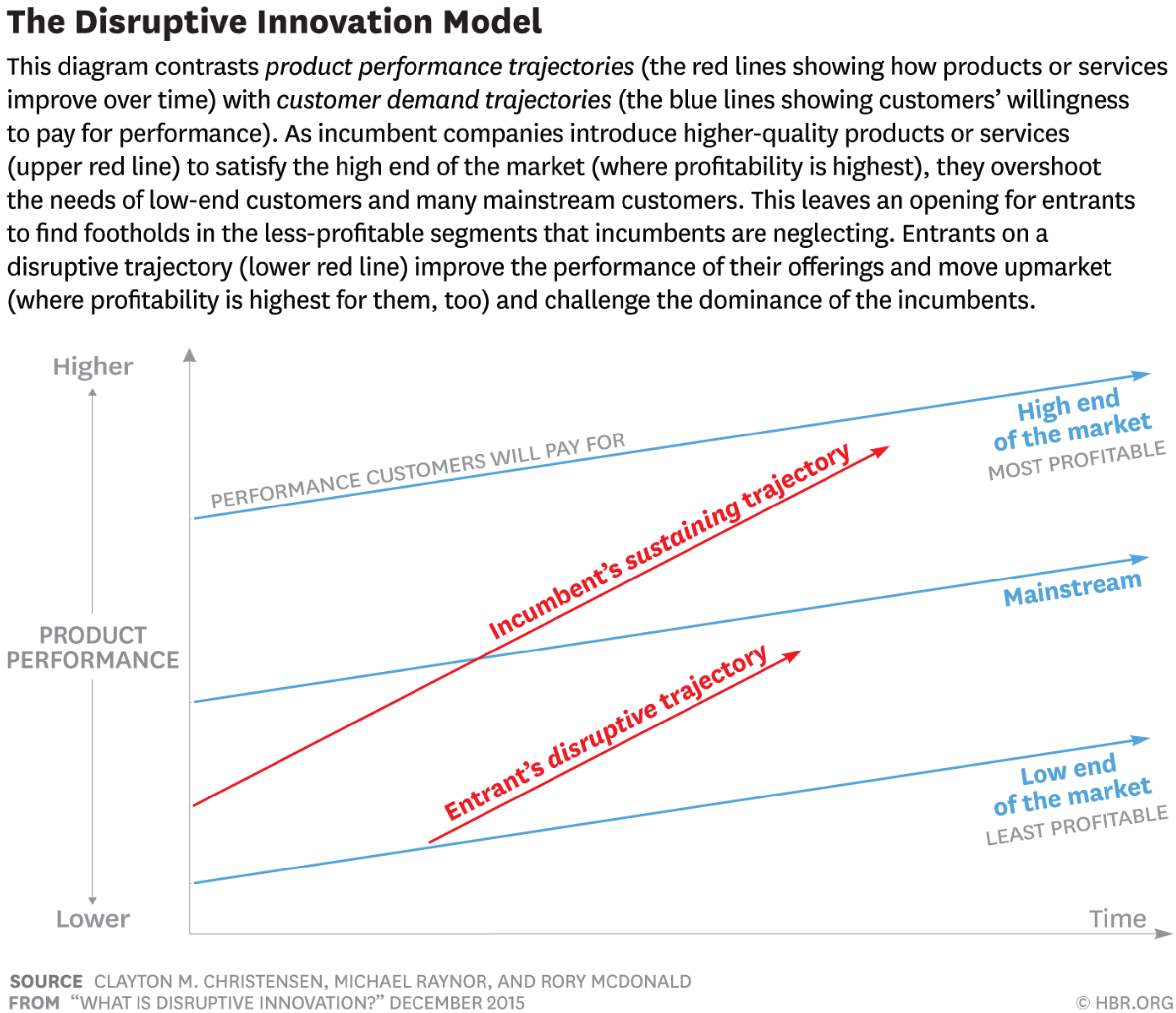

Figure 2.1The disruptive innovation model (from Christensen, Raynor & McDonald, 2015)

2.1.2 Failure framework

Christensen (1997, p.xvi) proposed a "failure framework" in order to understand the phenomena of disruptive technologies and how well managed companies could still fail. It is essential to understand the failure framework proposed by Christensen to assess whether this is applicable within the insurance industry in Mauritius. The failure framework is based upon on the following elements -

a) There is a very important distinction between "sustaining technologies" and "disruptive technologies";
b) The pace of technological progress outshoots the customers' needs; and
c) The customers and the structure of the incumbents influence heavily the kind of investment that the company would eventually make.

Sustaining innovation refers to those innovations that improve the existing product. Many established firms pursue sustaining innovation by paying attention to the needs of their customers and they think that it is not a sound decision to invest in disruptive technologies for three main reasons -

a) The disruptive products are lower end products with lower profit margins;

b) The disruptive products are initially commercialised in a small or emerging market;

c) The disruptive products are initially not appealing to the incumbent's customers and do not promise great returns. In a situation where the incumbent company is attentive to its customers' needs, the same company may not find the need to invest in a lower end of the market with a lower end product for lower profitability.

2.2 Evolution of disruptive innovation theory

2.2.1 Low-end market and new market

Danneels (2004, p.5) also observed that the most recent framework by Christensen and Raynor (2003) highlights the differences between low-end market disruptions and a new-market disruption. A low-end disruption addresses the low end of an existing value network, whilst the new-market disruption creates a new value network. A new-market disruption is one, which "*enables a larger population of people who previously lacked the money or skill to begin buying and using a product*'' (Christensen and Raynor, 2003, p.102). Christensen himself admitted that he had refined the theory. For example, Christensen (2015, p.4) conceded that, initially, there was an anomaly in his theory of disruptive innovation. In fact, it was initially assumed that disruptive innovation only comes from the low-end of an established market but it later turned out that disruption could also happen when new entrants have a foothold in a totally new market before moving upmarket. In comparison to its initial theory, Christensen (2015, p.4) also observed that usually in the low-end of an established market or in a new market, there is more than one entrant offering a product which is cheaper, simpler, and more convenient than that of the incumbent. He also observed the disruptive effect could drive both the new entrant and the existing organisation upmarket.

2.2.2 Business model v/s new technology

Gobble (2016, p. 66) stated that Christensen has modified the theory of disruptive innovation and the very meaning of disruptive innovation in his subsequent publications. Indeed, in "Innovator's dilemma (1997)", Christensen explained that new technology is a key to disruptive innovation. However, in a later publication (The Innovator's Solution, 2003), it appears that it is not the new technology that necessarily makes innovations disruptive, but rather the business model (Gobble, 2016). In many cases where disruption occurs, the new entrant's technology is often inferior to that of the incumbent's - therefore what matters most is how the technology is being used.

2.2.3 Predictive ability of the disruptive innovation theory

In 1997, Christensen was very cautious about the predictive ability of the disruptive innovation theory. However, 18 years later, Christensen (2015, p.9) asserted that

> *"The theory of disruption predicts that when an entrant tackles incumbent competitors head-on, offering better products or services, the incumbents will accelerate their innovations to defend their business. Either they will beat back the entrant by offering even better services or products at comparable prices, or one of them will acquire the entrant. The data supports the theory's prediction that entrants pursuing a sustaining strategy for a stand-alone*

business will face steep odds: In Christensen's seminal study of the disk drive industry, only 6% of sustaining entrants managed to succeed."

2.3 Criticisms of the theory of disruptive innovation

The criticisms of Christensen's theory of disruption can be classified in three broad categories -

A. Research Methodology and inadequate research
B. Unsatisfactory definitions
C. Flawed analysis

2.3.1 Methodology and inadequate research

Many authors, including Christensen (2015, p.4) himself, found that theory of disruptive innovation needed refinement and called for further research.

In an article "The Disruption Machine", Lepore (2014) has argued that Christensen handpicked the cases to support his work and that it is a weak foundation to build a theory on. Lepore stated that the theory uses isolated observations from the past to predict in a future. Accurate prediction is not just only based on the quality of the evidence but also on "*the method to gather and interpret*" those evidences (Lepore, 2014, p.4).

2.3.2 Unsatisfactory definitions

Weeks (2015) suggests that the definitions of "*sustaining innovation*" and "*disruptive innovation*" need to be more constrained. He proves his point by using Christensen's prediction for iPhone and Kodak. Christensen stated that the iPhone would fail and grouped it as "sustaining innovation" since it simply does not lie within the definition of "*disruptive innovation*". Weeks said, however, iPhone does not fit in the "*sustaining innovation*" category in the long run either, since the iPhone created a new market. According to Weeks, the curves of technology development are so complex and interdependent. It is hard to fit all firms with different developments into two categories as "*sustaining innovation*" and "*disruptive innovation*".

While Weeks (2015) agreed that the digital photography disrupted the photographic film industry, he argued that the way the disruption came about did not fit within Christensen's theory. He cited the examples used by Christensen (2006) - Teradyne and Kodak. Teradyne became successful while Kodak failed miserably while both of them were trying to respond to a disruptive threat by having new separate units to develop disruptive product. Kodak was initially working with professional photographers to build its digital cameras and at one point it was dominating that particular market (Gustavson ,2009, p. 341). Christensen advised Kodak to stay on the low-end camera and set up autonomous units for the digital cameras. According to Weeks, by following Christensen's advice, Kodak lost its ability to compete in a bigger digital photography market since it has not developed the key high-end features for its cameras. Christensen claimed that the change in management was the cause of Kodak's downfall and stated that Kodak failed because instead of focusing on setting up an independent unit, its focus moved to operational efficiency (Euchner, 2011).

Weeks (2015) stated that Christensen's theory is still a useful framework. However, he suggested that we ought to have an understanding of the complicated dynamics related to innovative products and help firms to build an effective strategy.

Chase (2016) suggested that the definition of "disruptive innovation" should be enlarged. She qualified Airbnb as a disruptor of the hotel industry, Uber as disruptor of the taxi industry, Coursera and MOOCs as disruptors in education. However, Christensen said that Uber is not disruptive since it is not creating any new market by serving new, low end customers. Uber created the "sustaining innovation" to reduce its own overhead cost and offer the customer a creative and convenient way of transportation. For example, in a city at peak time, Uber is not so much cheaper fare or sometimes can be even more expensive compared to taxis.

Markides (2006, p.1), on the other hand, argued that disruption innovations should be broken down into "*finer categories*". He proposed three categories - technological innovations, business model innovations, and radical (new-to-the-world) product innovation. Each of those categories have different characteristics, result in different competitive effects and create different types of markets.

Alternative definitions

Some authors have even proposed new definitions to capture the disruptive innovation. Thomond (2002, p.4) proposed the following – "*A disruptive innovation is a successfully exploited product, service or business model that significantly transforms the demands and needs of a mainstream market and disrupts its former key players*". The Disruptive innovation would have the following characteristics:

1. It becomes successful by fulfilling of an emerging or niche market.
2. Mainstream market initially under-appreciates the performance features of that product while those features are highly regarded by the niche market. The competitor and mainstream customers see the innovation as substandard.
3. When the niche market adopts the new product, further investment in the product, service and business model is possible. Subsequently, the product or service can expand to new niche markets and reach new customers.
4. the increasing awareness of the product, service or business model changes the mainstream market's perception of value.
5. The change in the of value is the catalyst enabling the disruptive innovation.

Danneels (2004, p.4) defined disruptive technology as a technology that changes the bases of competition by changing the performance metrics along which firms compete. Schmidt and Druehl (2008, p.348) offered a different framework based on the diffusion process of the disruptive innovation. The latter claimed that, in contrast with the diffusion process of a sustaining innovation, the diffusion process of a disruptive innovation is initially less disruptive to the established business (Schmidt and Druehl, 2008, p.348)

2.3.3 Flawed analysis

According to Lepore (2014, p.5), Christensen's analysis of the disk drive industry was flawed. Christensen took in account one hundred and sixteen technologies and he classified a hundred and eleven as a sustaining innovation and five as disruptive innovation. Christensen stated that each of these five technologies "*were slower and had lower capacity than those used in the mainstream market*" and those entrant firms that adopted those technologies ended up displacing the incumbents (Christensen, 1997, p.133). Lepore pointed out that Christensen erroneously classified Seagate as a new entrant in the disk drive industry when the latter introduced the 5.25 inches disk drive in 1980. In fact, according to Lepore, Seagate was not a new player in the disk drive industry - Seagate was formerly known as Shugart Technology and Shugart Association. Shugart Association was founded in 1973 by Alan Shugart.

Lepore also criticised Christensen for his arbitrariness in deciding how successful a company based on its revenues. The 'successful' firms were defined as those exceeding fifty million dollars in revenue in any one year between 1977 and 1989, even if the firms quit the market. According to Lepore, a substantial part of Christensen's theory was based on this definition of success. Lepore pointed out that when Christensen published his book "*The Innovator's Dilemma*", in 1997, Seagate was the largest company in the disk drive industry with the turnover of nine billion dollars whereas, those firms described as a "*disrupter*" by Christensen were no longer in existence.

Christensen, while citing the excavator industry to support his theory, stated that the incumbents which were then focussed on building cable-operated excavators failed to recognise the threat of hydraulic excavators and most of them were taken out of business. He identified thirty established firms in the nineteen-fifties and by the nineteen seventies, out of thirteen new entrants *only four had survived in the industry*. The four firms were O&K., Caterpillar, Demag and Hitachi. As reported by Lepore, the companies were marked as new entrants by Christensen, had in fact been manufacturing cable-operated shovels for several years. She also argued that the newcomers would only be able to sell lots of hydraulic excavation if they had a strong distribution network. According to Lepore, the so-called incumbents, which Christensen claimed to have been disrupted, were not doing as bad as the latter claimed.

Christensen explained the failures and successes in the discount store industry. According to Christensen, Kresge created Kmart, Dayton-Hudson created Target while Woolworth which created Woolco. Kmart and Target became successful and Woolco flopped. Unlike Kresge and Dayton-Hudson which were running the new businesses separately, Woolworth decided to run its discount store in house, thus the failure. For Christensen, “two models cannot peacefully exist within a single organisation”. Lepore pointed out that Christensen omitted to mention that Kmart had closed more than a hundred stores in the nineteen fifties. In 2002, Kmart eventually went bankrupt.

When it came to the milling industry, Lepore argued that Christensen had a tendency to ignore the factors which did not support the theory. Christensen said that the mini milling technology is a disruptor of the steel industry. He mentioned that the labour hours to produce steel reduced from nine hours to three hours; which affects the workforce. In turn, it leads to a reduction from ninety-three thousand to twenty-three thousand workers in 1991. Lepore argued that Christensen failed to point that twenty-two thousand workers from U.S. Steel were not working from 1986 to 1987, due to the industrial actions and most of the new workers at the mini-mill manufacturing plants were non-unionized. Lepore questioned Christensen’s belief that the US Steel was struggling because it had failed to respond to build minimills. Lepore concluded that today U.S. steel is still the largest producer of steel in the United States.

In a recent publication by Maxwell (2017), the author made the point that it is more difficult for firms to avoid disruption nowadays compared to twenty years earlier, when “*The Innovator’s Dilemma*” published. He said that the disruption was previously often referred to “*as a problem of accounting and organisation design*”, whereby the disruptive products and services were, by definition, cheaper, lower quality, and lower margin and those who wanted to respond had to build as separate business unit to focus on disruptive innovation. That was the old dilemma.

According to Maxwell, the examples used by Christensen in his book were “*asset-heavy*” - for example, disk drive or excavator industry. However, many modern firms are mostly “*asset-light*” businesses which are not financed with debt but rather with equity. It is not an organisational problem anymore, it is a financial problem whereby those incumbents may easily set up a new business unit to respond to disruption because they cannot invest capital at the same speed as the new entrants, the modern disrupter. Those aspects are not taken into account in Christensen's work.

2.4 Inhibitors of disruptive innovation capability in large corporations

Assink (2006, p.227) proposed a conceptual model to illustrate some factors affecting the disruptive innovation capabilities in large corporations. The factors in this model were divided into five clusters

1. The "adoption barrier";
2. the "mindset barrier";
3. the "risk barrier";
4. the "nascent barrier"; and
5. the "infrastructural barrier".

The first cluster is built on the "*organisational rigidity*" and "*the existence of a dominant design*" brought up by the successful products from the past. This factor affects the restructuring of the organisation and restricts the company's interest in taking risky innovative strategy or utilise its past investment.

The second cluster is the "mindset" barrier and it includes the inability to learn, "*lack of distinctive competencies, maintaining mental models that are out of sync*". Assink (2006) further stated that the "*mindset barrier*" is a potential inhibitor for disruptive innovation. If the management is not courageous enough to take business risks or in "*cannibalising the existing products and market*" at a right time, it limits the ability to reinforce the business structure or perceive new opportunities. The first and second clusters are claimed to be the main inhibitors.

The third cluster is "*risk barrier*". Assink (2006) also explained this factor is seen as how a company attitude toward to taking risks and the lack of courage senior management to distinguish the "*meaningless risk and meaningful risk*".

The fourth cluster, called the "*nascent barrier*", is associated with the inadequacy of team and motivation, the ability to feel "*the weak signals*" can lead to an unsuccessful disruptive innovation strategy.

The last and fifth cluster called "*infrastructural barrier*", refers to the lack of necessary infrastructure which is needed for the commercial exploitation of an innovative product (Assink, 2006). Another component of the fifth cluster is the lack of follow through on which competitive advantage can be based.

2.5 Disruptive innovation in emerging and developed economies

Corsi and Minin (2013) published a research paper on Reverse Innovation, Disruptive Innovation by considering the geographical dimension. They drew up a list of the key similarities and differences between disruptive Innovation in emerging and developed countries.

Table 2. Differences between Disruptive Innovation in Emerging and Developed Economies

Characteristics/ Location	Early Market	Actors	Expansion	Maturation of Technology	Challenges	Compete/Succeed based on
Disruptive Innovation in Developed Countries	• Advanced/ Innovative early adopters seeking to be "educated" and to try the new technology. • Typically small, advanced niche	Spin offs or new entrants able to be flexible enough to serve the niche	Into mainstream market of the same country through a process of upgrading "mainstream technological attributes"	Profits from early markets are invested (driven by early market requests) into the development of technology that is improved with respect to that from incumbents through path dependence	Standard battle amongst start-ups	• Speed of development • High margins once the incumbents have been disrupted
Disruptive Innovation in and from Emerging Economies	• Large majority of population with no means to get to established technologies • Typically large BOP	Subsidiaries of MNCs and large local companies that are able to exploit economies of scale	Into mainstream market of emerged countries through a process of reverse innovation	Same process of maturation	• Distribution in vast markets • Requirement to access market needs • Requirement to understand and respond to market needs	• Volume • Costs and reorganization of products/ services

Table 2.1 Differences between Disruptive Innovation in Emerging and Developed Economies (Corsi and Minin, 2013).

2.6 Insurance industry

2.6.1 The development of the insurance industry in the last decade.

In 2016, the global insurance industry was estimated to be worth 4.6 trillion Euros in terms of premiums (McKinsey Global Insurance Pool, 2017). Lester (2009) stated that the insurance industry is a global industry even though there are less than fifteen global insurance organisations. In 2003, seven insurance companies were among the world's top fifty corporations in terms of revenue. Further, when it comes to market capitalisation, insurance companies represented half of the top four financial institutions in the world.

2.6.2 Value chain in the Insurance industry

Many authors and researchers have had different maps of the value chain in the insurance industry. One possible reason for this difference of views is probably the fact that the industry is facing and undergoing a major change. This was highlighted in a report entitled "*The debate in the Insurance value chain*" by Van Rossum, de Castries & Mendelsohn (2002).

Sia Partner (2015) illustrated the traditional value chain within in the insurance industry with 6 different components: marketing, distribution & channel management, product development, underwriting, policy administration and claims management.

Table 2.2 Traditional insurance value chain (Sia Partner, 2015)

Table 2 gives another example of the value chain in the insurance industry. The insurance value chain is composed of the following main components.

Marketing	Market research and analysis Market development Product launch Branding & Positioning Campaign Management Public Relations
Distribution and Channel Management	Direct Sales Lead Management Pre-sales Support Sales Budgeting Performance review
Product Development	Market Analysis Product profitability simulation Customer segmentation / value analysis
Underwriting / New Business	Quotation Document Submission Underwriting Reinsurance
Policy Administration	Registration Validation
Claim Management	Claims assessment Claims review Claims adjudication

Table 2.1 The components of the traditional insurance value chain

Today each of the links in chain of insurance business is facing a major change because of the technology shift which is taking place. The technological advancement is having an impact on Product Management, Sales & Distribution, Underwriting, Claims Processing, Payments Processing or Customer Service.

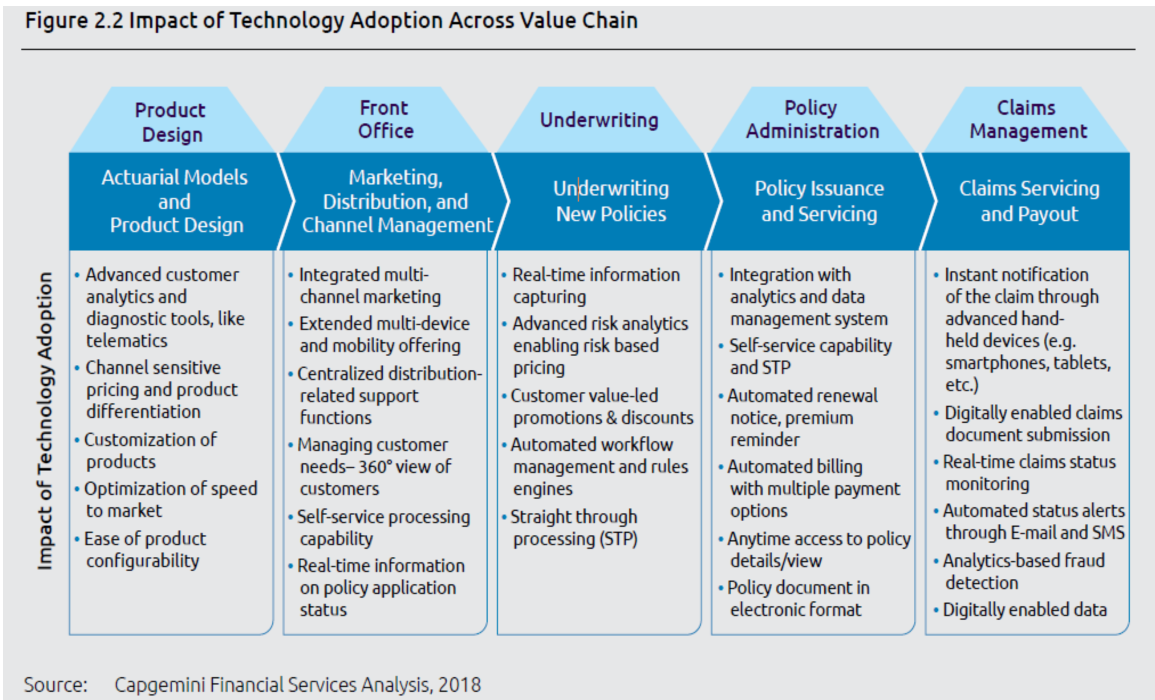

Figure 2.2 Impact of technology adoption across value chain (Capgemini Efma, 2018, p.27)

Figure 3 illustrates the effects of technology adoption on the insurance value chain. From the customised product design to integrated front office to STP (Straight Through Processing) underwriting, automated billings or real-time claims system, the influences of digital technology is come across the insurance value chain.

2.6.3 Overview of Insurtech

"Insurtech" or "Insuretech" is a term that has become popular in the recent years. The word "insurtech" is the result of the contraction of two terms - "insurance" and "technology". It is inspired from the use of the word "fintech", which itself is a portmanteau of "financial" and "technology". In a report by BBVA Research (2016), insurtech was defined as follows -"*InsurTech can be defined as the result of the extensive use of technology in the insurance sector, materialized in new innovative products and services, and it is causing a revolution in this sector".* Notwithstanding the variety of definitions, the term "insurtech", in essence, can be understood as referring to the use of digital technology in the insurance market.

According to CB Insights, since 2011 insurtech start-ups have raised (USD) $5.67 billion in capital across 464 deals. In 2016, $1.69 billion was invested in 173 insurtech start-ups. This investment represented an increase of 37% compared to 2015. PWC (2016) observed that there is an increase in investments from existing established insurers like Allianz, Aviva and XL Catlin. This is a sign of the opportunity and also the threat posed by those insurtech start-ups. Indeed, according to the PWC's Global Fintech (2016) survey, around 74% of the insurers saw that their business is at risk of disruptions by start-ups.

2.6.4 Mauritius and its insurance industry

Mauritius

The Republic of Mauritius consists of a few islands in Indian Ocean - main island of Mauritius, Rodrigues, Agalega and St. Brandon. The population size in 2016 was 1,262,132 inhabitants (World Population Prospect, 2017). Mauritius is a former British, French and Dutch colony. It gained independence from Great Britain in 1968 and became a republic in 1992. It is fairly young nation (Le Mauricien, 2014).

The Mauritian Rupee (MUR) is a currency used in Mauritius. English and French are the national languages. The GDP Purchasing Power Parity (PPP) in 2018 was estimated to be 20,909 USD per capita with a total of 27.507 billion US dollars (International Monetary Funds, 2014). Mauritius ranks 25th in the global ranking of the World Bank for ease of doing business and tops all other African countries.

Insurance industry background in Mauritius

The insurance industry in Mauritius is part of the financial non-banking sector. The Financial Services Commission (FSC) is the regulator which is responsible for issuing licences to insurance companies, supervising and ensuring that the operation of licensees complies with FSC codes and regulations. The Financial Services Commission falls under the purview of the Ministry of Financial Services and Good Governance.

According to the statistics, in 2017, the gross value added amounted to 12.46 billion MUR (approximately equivalent to 311 million Euros) for insurance, reinsurance and pension. The Insurance industry has grown by 5% in 2017 compared to 2016, which made it one of the fastest growing industry in Mauritius (Statistic of Mauritius, 2017). The Mauritian insurance industry is governed by the Financial Services Act 2007, the Insurance Act 2005, codes and guidelines issued by the FSC as well as a set of other regulations like the Insurance Regulations 2007 which for instance stipulates that an insurer has to maintain at all times a stated capital of not less than 25 million rupees (~ 625,000 Euros) (Insurance Regulations 2007).

As from January 2011, insurance companies were divided into two separate units, for which there were two distinct licences -

(1) long-term insurance; and
(2) general insurance business (Insurance Act 2005).

Long-term insurance consists of life assurance, pension, permanent health insurance, linked long-term insurance business. General insurance includes accident and health, engineering, guarantee, liability and miscellaneous policy. This law has led to a few consolidations in the insurance market in Mauritius. There are currently seven long-term insurance businesses and fifteen general insurance companies registered under FSC in Mauritius.

D. Vittas (2003) stated that the insurance industry in Mauritius is characterised by a highly oligopolistic structure, with only few companies holding the majority's share of the market. According to his research, the largest group were Sicom, Swan and British American Insurance, which control 76 percent of total assets in life insurance. British American Insurance (BAI) was closed down by the government in 2014 because of an alleged Ponzi scheme (Maglich, 2015).

2.7 Inhibitors and enablers

According to Anthony, Roth, and Christensen (2002, p.16), a distinction should be made between (a) the disruption event which includes the inability of the incumbent to respond effectively; and (b) the process leading up to the disruption. Equally, it is important to understand the relationship between incumbent 'failure' and entrant 'success' (Chesbrough, 1999, p.4).

2.7.1 Level of concerns

The theory of disruptive innovation focuses mainly on the industry level and the organisation level (Christensen & Raynor, 2003). Christensen's theory, however, also highlights the role of managers from incumbent organisation, particularly the fact that managers tend to ignore or underestimate threats of disruption and the result being an inability to respond to such threats.

2.7.2 Location

Another notable aspect of Christensen's theory is that the data upon which the theory was built comes mostly from the United States and it concerns the U.S. markets. Does the location matter? Chesbrough (1999, 2003) argues that there are national institutional factors influencing the disruption process since, as a system, they affect the organisational constraints. The national institutional factors include the technical labour market, the venture formation capital market and the structure of buyer–supplier ties. Chesbrough (1999, p.33) also stated that the experience of one organisation in one institutional context may be different from that of another organisation in the same industry managing these challenges in another institutional context.

2.7.3 Motivation and ability

Anthony, Roth & Christensen (2004, p.19) argue that there are two main factors for thriving innovation – motivation and ability. The motivation is defined the market incentive to innovate and ability is defined as the capability to acquire resources, turn them into products or services and deliver to the customers. However, there are some non-market factors such industry standards, cultural norms and government regulations that affect motivation and ability to innovate (Christensen, Anthony & Roth, 2004). The work of Assink (2006) equally drew on the adoption, mindset and risk barriers as inhibitors of disruptive innovations in large organisations.

2.7.4 Regulations

The relationship between innovation and non-market forces such as regulations have been understudied according to Christensen, Anthony & Roth (2004, p.2). The latter pointed out that regulations in industries like financial services, healthcare or education play an important role and affect innovation since they can have a substantial impact upon motivation and ability of entrants and incumbents (Anthony, Roth & Christensen. 2002; Christensen, Anthony & Roth 2004).

Nicoletti (2016, p.7) took the view that digital insurance is a "*disruptive and systemic innovation*". He also argued that there are four disruptive factors in the insurance industry, namely, -

1. urbanisation;
2. technology;
3. demographics; and
4. globalisation

2.7.5 Preliminary conceptual Framework

Based on the literature review, a preliminary conceptual framework has been developed to help us understand what are the factors which enable or discourage disruption innovation in the insurance industry in Mauritius. The framework is made up of three main modules – The external factors, internal factors and the Motivation/Ability. The external and internal factors influence the motivation and ability to disrupt or respond to a threat of disruption.

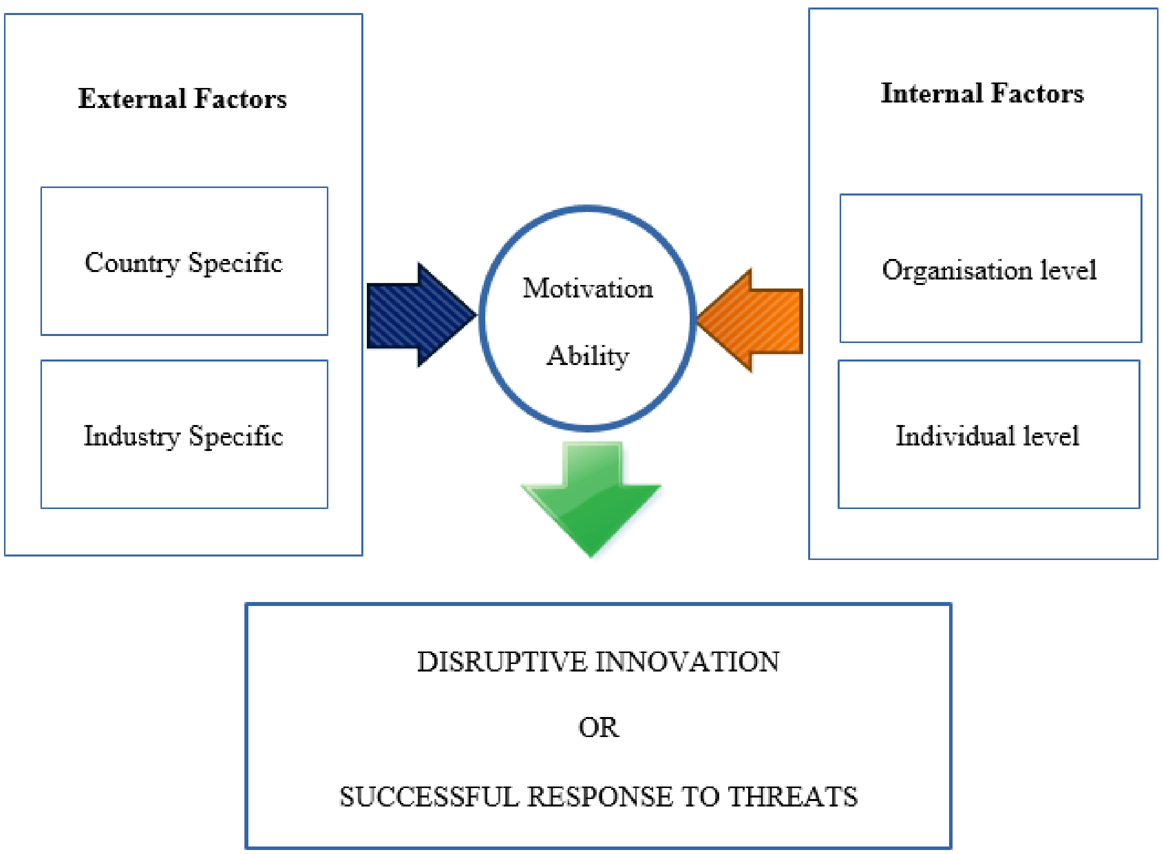

Figure 2.3 Preliminary conceptual framework

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CHAPTER 3 METHODOLOGY

This section explains the method approach adopted to gather data. It also provides some background information about the process for choice of the topic for this research and the motivation behind it.

3.1 Thesis topic and structure

Disruptive innovation and 'insurtech' are very broad topics on their own. During the initial investigation, I had recourse to JSTOR to direct my search on those two topics. What was noticeable is that there is little research material or studies which have combined both topics. The initial investigation and the literature review triggered several questions about -

(a) the whole notion, perception and use of the term disruptive innovation;
(b) the likely manifestation of that phenomena in a different area of world;
(c) the disputed cases of 'disruptive innovation' as highlighted by Lepore;
(d) the rationalisation of disruption in certain industries and whether the same analysis could be transposed to a different industry; and
(e) The perceived lack innovation in the insurance industry;

Since the theory of disruptive innovation has been challenged on so many levels, there were outstanding questions about what truly affects disruption in a market and whether the theory of disruptive innovation is of universal application across all industries. There was obviously a need to limit the scope of enquiry in this thesis and at the same time capture the essence of the theory of disruptive innovation and understand its dynamics in the insurance industry. This prompted the research question and the sub question referred to in Paragraph 1.2.

The Structure

The conceptual framework was devised to show the essential elements affecting disruptive innovation. However, the conceptual framework on its own does not account for all factors that influence disruption. A case study was hence essential to explore those factors and an analysis of those findings led to the refinement of the framework and the conclusions. The research process which was designed was based on work of Uma (2003, p.56) and it is illustrated in Figure 5.

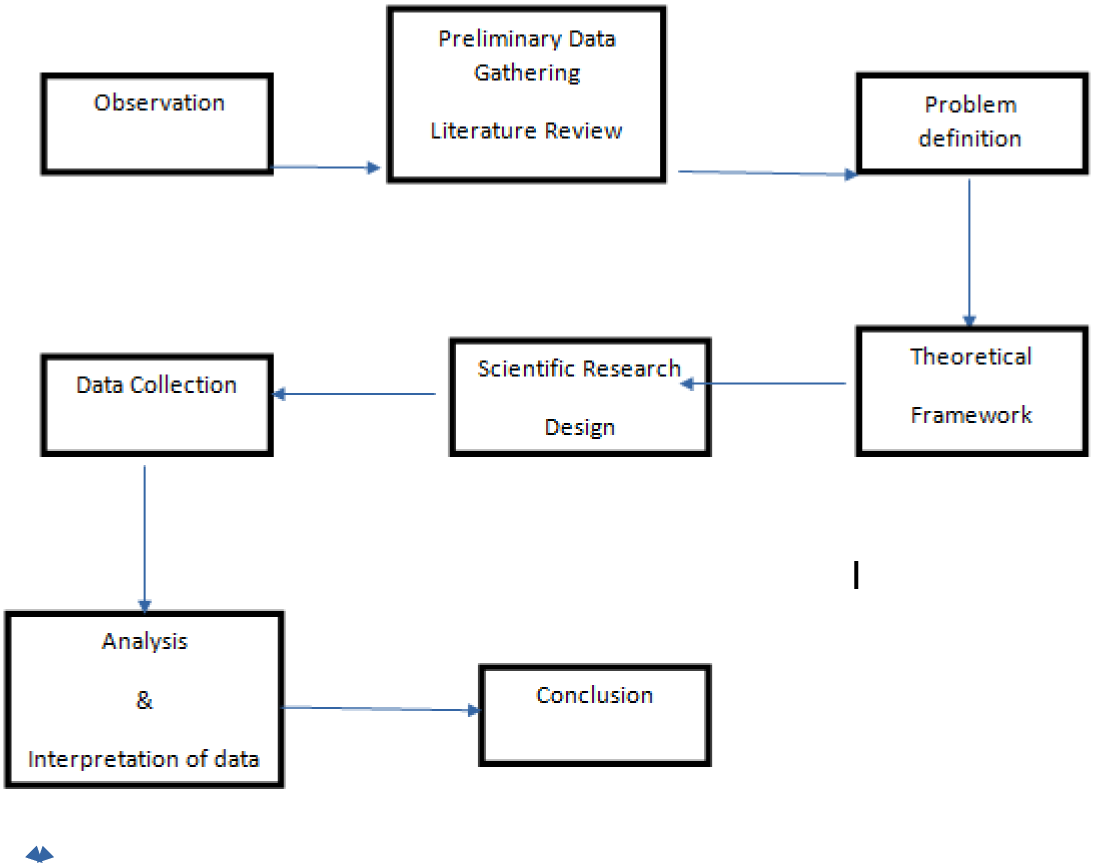

Figure 3.1 The research process

3.2 Research approach

3.2.1 Exploratory research

According to Lekvall & Wahlbin (1993), there are four different types of studies: exploratory, explanatory, descriptive and predictive. The research questions set out in this thesis call for an exploratory research since there are no studies on those very specific questions which have been examined in a specific setting like the insurance industry in Mauritius. There are some unanswered questions identified through the literature review and there is a need to further understand the phenomena of disruptive innovation in that specific context through exploratory research.

3.2.2 Quantitative or qualitative?

Quantitative research and qualitative research are different but they can also overlap a lot (Neuman, 2014, p.16). The main distinctions between those two types of research are illustrated in Table 3.

TABLE 2 Quantitative versus Qualitative Approaches

QUANTITATIVE APPROACH	QUALITATIVE APPROACH
Measure objective facts	Construct social reality, cultural meaning
Focus on variables	Focus on interactive processes, events
Reliability the key factor	Authenticity the key factor
Value free	Values present and explicit
Separate theory and data	Theory and data fused
Independent of context	Situationally constrained
Many cases, subjects	Few cases, subjects
Statistical analysis	Thematic analysis
Researcher detached	Researcher involved

Sources: Crewsell (1994), Denzin and Lincoln (2003a), Guba and Lincoln (1994), Marvasti (2004), Mostyn (1985), and Tashakkori and Teddlie (1998).

Table 3.1 Quantitative vs qualitative approaches (Neuman 2013, p.17)

The qualitative method is appropriate for this research. There is a need to understand the theory of disruptive innovation as well as the underlying factors in a specific industry and a specific geographical context. Yauch and Steudel (2003, p.472) take the view that in order to fully understand an organisation it is essential to understand what is driving their behaviour. The qualitative method involves an exploration of the cultural values, beliefs, assumptions and perception which could not be captured by the quantitative method. The author is nonetheless mindful of the fact that the qualitative method has some limitations in that not all answers can be gathered from this method and some important issues may go unnoticed either because the participants may be biased and too subjective or because of the limits of interpretation of the data collected. Qualitative methods typically refer to a range of data collection and analysis techniques that use purposive sampling and semi-structured, open-ended interviews (Dudwick, Kuehnast, Jones & Woolcock, 2006). In this thesis, on four case studies were deemed to be sufficient for the purpose of the providing generalised conclusions (Yin, 2009).

3.2.3 Data collection

Collection of data can be classified as either primary or secondary (Arbnor and Bjerke, 2009). An example of primary data is data collected through interviews. Secondary data refers to information obtained for example, through newspapers, online articles or company records. For the purpose of this thesis, data was gathered through in-depth semi-structured interviews, a method which is very common in case studies (Yin, 2002). The interview allows the interviewer to obtain rich information, spontaneous answers and it is also known to generate a higher response (Oppenheim, 1992).

Prior to the interview, the questions were sent to interviewees. Then the interviews were conducted face to face, they were recorded and notes were also taken during the interviews. The transcripts of the interviews are found in the Appendix II. An archival research was also conducted to obtain background information on the insurance companies in Mauritius. Such information was obtained from company reports and the Financial Services Commission which regulates the non-banking financial services in Mauritius.

3.2.4 Quality of research design

There are four tests commonly applied to all social science methods (Kidder & Judd, 1986, pp. 26-29) -

1. *Construct validity:* "identifying correct operational measures for the concepts being studied";

2. *Internal validity*: seeking to establish causal links between conditions, as opposed to spurious links;
3. *External validity:* "defining the domain to which a study's findings can be generalized"; and
4. *Reliability:* showing that the operations of a study can be repeated and return the same results - e.g. data collection procedures.

For the purpose of this thesis, the internal validity test is not applicable since it is an exploratory research (Yin, 2009).

Test	**Case Study Tactic**	**How**	**Phase of research**
Construct validity	Use multiple sources Establish chain of evidence	In-depth interviews with senior managers and officers	Data Collection
External validity	Replication logic in multiple case studies	Apply replication logic method	Research Design
Reliability	Use Case Study protocol develop case study database	Develop case study protocol Transcriptions of recorded interviews	Data Collection

Table 3.2 Case study tactics for three design tests (Yin, 2009, p.41)

3.3 Case selection

3.3.1 Case study

According to Yin (1994, p.288) there are various ways to conduct qualitative research, including through case studies, experiments, surveys, histories, and archival analysis. A case study can be either a single study or multiple studies Yin (2003). Eisenhardt (1989, p.534), argues that "*a case* *study is a research strategy which focuses on understanding the dynamics present within single settings*". Case studies constitute a methodology which is appropriate to generate managerially relevant information (Amabile et al., 2001; Leonard-Barton, 1990). This thesis relies on multiple case studies to answer the research questions. There are several reasons why this thesis is relying on multiple case studies, namely, -

(a) Multiples cases tend to help to build a more convincing theory with much empirical evidence (Eisenhardt and Graebner, 2007, p.2);
(b) the evidence gathered from a multiple case studies is more reliable (Baxter & Jack, 2008, p.9);
(c) Multiple cases allow broader exploration of research questions (Eisenhardt & Graebner, 2007, p.4);
(d) When the case studies are compared to each other, much insight can be gained from the contrasts and similarities (Vannoni, 2014);
(e) there can be an analysis within a single situation as well as across different situations (Yin, 2003).

This thesis follows the multiple case studies approach proposed by Yin (2009) and as illustrated in Figure 6.

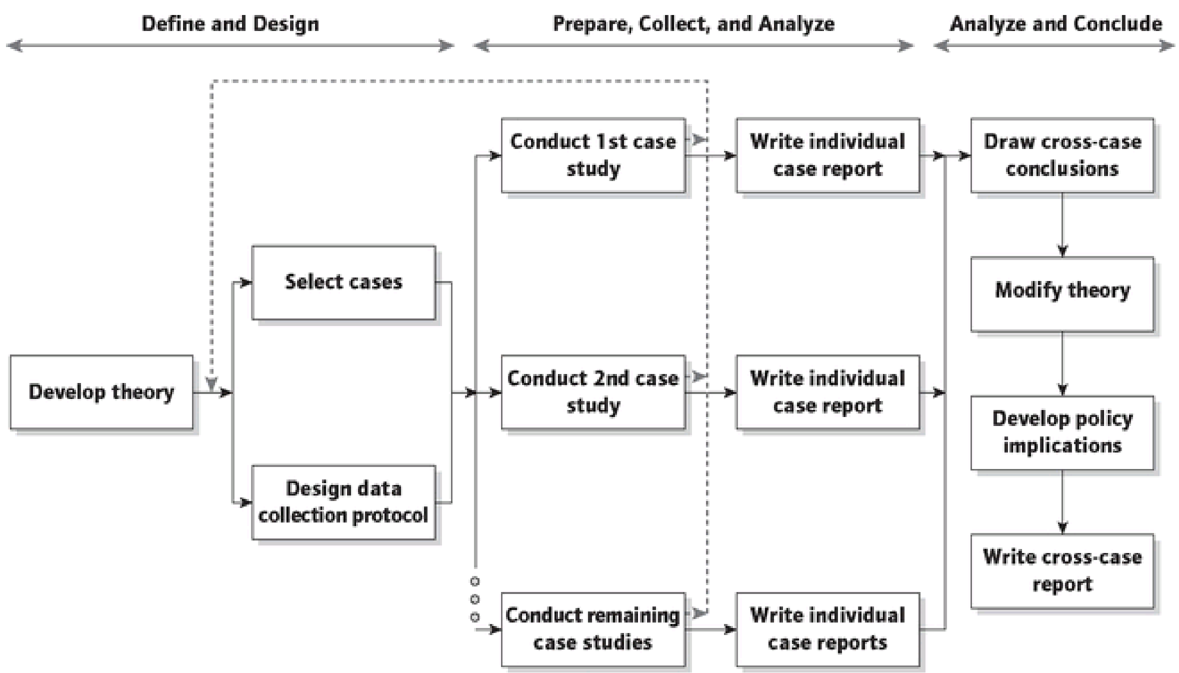

Figure 3.2 Case study approach (Yin, 2009)

3.3.2 Sampling

The sample companies were selected based on a judgmental sampling method (Eisenhardt, 1989). The cases were chosen in such a way that the analysis of those cases would help explain what factors positively or negatively impact disruptive innovation in the insurance industry in Mauritius. The insurance industry is considered as one of the most static industries. The insurance industry was chosen because it could provide an interesting insight into either the state of innovation in the industry, the factors at industry level they could affect disruptive innovation or the theory of disruptive innovation itself in case there is an unexplained anomaly.

Four companies in the insurance industry were chosen for several reasons. Firstly, the sampling of method would help to bring out the differences between the new entrants and the incumbents in the insurance industry in Mauritius. Secondly, the large established companies could give insight in the existing managerial practices or structures that are affecting disruptive innovation. Lastly, a different set of companies would give broader perspective of competition, cultural factors and consumer behaviour. A brief profile of the four insurance companies is summarised in Table 4.

Company Name	Type of Insurance	Incorporation Date	Profit in 2017 (MUR)	Interviewee	Position of interviewee
Swan Life Ltd	Long-term insurance	30-04-1951*	2,023,063,000	Mr. Gaël Aliphon	Manager- Sales and Development- High performance coaching
Swan General Ltd	General insurance	31-03-1955*	236,639,000	Mr. Gaël Aliphon	Manager- Sales and Development- High performance coaching
La Prudence (Mauricienne) Assurances Limitée **	Long-term insurance	01-06-1988	135,215,396	Mr. Jason Siew	Assistant manager – distribution and partnership
Metropolitan Life (Mauritius) Ltd	Long-term insurance	12-08-2010	-86,485,000	Mr. Guyto Devalet	Business Development Manager
Quantum Insurance Ltd	General insurance	15-10-2014	-72,192,304	Mr. Devesh Biltoo	Chief Operating Executive

Table 3.3 Summary of the chosen companies and interviewees

*Swan Insurance Company Limited was incorporated in 1955 as a result of the merger of two companies Colonial Fire Insurance Company limited (incorporated in 1913) and Mauritius Fire Insurance Company Ltd which started in 1855.

** La Prudence (Mauricienne) Assurances Limitée is a subsidiary of the Mauritius Union. Mauritius Assurance Company Limited which was incorporated on 26/7/1948

3.3.3 Questionnaire design

The questionnaire was divided into ten sections and all the questions were in English. The questions were formulated based on the literature review, the research questions and the theoretical framework. In order to ensure relevance and reliability (Zikmund, 2003) and also to allow further exploration, there was a combination of open and closed questions.

The list of questions asked in the interviews can be found in Appendix I.

3.3.4 Case study design

Component of the case studies

According to Yin (1994) the case study design must have the following five components:

(a) the research question(s);
(b) its propositions, if any;
(c) its unit(s) of analysis,
(d) the logic linking the data to the propositions and
(e) criteria for interpreting the findings.

The main research question is as follows - "What are the factors enabling or discouraging disruptive innovation in the insurance industry in Mauritius?"

The sub-questions are:

1. Is there disruptive innovation in the insurance industry in Mauritius?

2. What are factors enabling disruptive innovation in the insurance industry in Mauritius?
3. What are factors discouraging disruptive innovation in the insurance industry in Mauritius?

The study propositions

A study proposition would direct the attention to the something which ought to be examined as part of the scope of the study (Yin, 2009). Given that there is a lack of studies on the main research question and also due to the fact that the study is exploratory, there are no study propositions.

The unit of analysis

Yin (2009, p.30) states that "*as a general guide, your tentative definition of the unit of analysis is related to the way you have defined your initial research questions*". This thesis seeks to explore disruptive innovation in the insurance industry in Mauritius. The scope of thesis covers insurers only. The units of analysis are therefore the organisations.

Linking the data to the propositions

The current state of the art does not provide detailed guidance on that component (Yin, 2009). The author has used the cross-case synthesis as the analysis technique. The case study data which was gathered is directly relevant to the research question itself.

Criteria for interpreting the findings

Since there was no statistical analysis of the findings, the alternate strategy was to identify and address the rival explanations for the findings (Yin, 2009).

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CHAPTER 4 CASE STUDIES

This chapter deals with the results of the four interviews and presents the multiple case studies described in Chapter three. The results stem from the interviews of senior managers from four insurance companies, namely:

- La Prudence (Mauricienne) Assurances Limitée, a subsidiary of Mauritius Union Assurance Company Limited,
- Swan Insurance (Swan Life Ltd, Swan General Ltd),
- Metropolitan Life (Mauritius) Ltd and
- Quantum Insurance Ltd

For ease of reference and understanding, in this chapter and the next one,

1. La Prudence (Mauricienne) Assurances Limitée is referred to as "La Prudence";
2. Swan Life Ltd/Swan General Ltd are collectively referred to as "Swan Insurance";
3. Metropolitan Life (Mauritius) Ltd is referred to as "Metropolitan Life"; and
4. Quantum Insurance Ltd is referred to as "Quantum Insurance"

This chapter consists of two main parts. Since the purpose of the case study is to have a deeper appreciation of the context, there will be, firstly, some background information about each of the above organisations and a brief profile of the interviewee. The profiles will provide some context which will later be useful in -

1. understanding the various statements made by the interviewees; and
2. assessing different factors based on the respective situation of the companies, for example, in terms of size, as incumbent or as a new entrant.

Secondly, there will be a description of the results. The findings from the interviews have been grouped into themes. A cross-case analysis is also provided to identify the similarities and differences between the cases. The transcripts of all the interviews are found in Appendix II.

4.1 Background information

The first interviewee was Mr. Guyto Devalet, Business Development Manager at Metropolitan Life. He is an Associate of the Chartered Insurance Institute and has more than thirty years of experience as an insurer. He first started as a Branch Manager for five years and then became Operation and Technical Manager in life insurance at La Prudence. Afterwards, he went to work at Mauritian Eagle Insurance as Life Technical Manager. In 2013, Mauritian Eagle was acquired by a South African holding company and it was rebranded as Metropolitan Life.

Mr. Gaël Aliphon, Sales Manager at Swan Insurance was the second interviewee. He has been working in the insurance industry for about twenty years. He first started with life insurance. He is an Associate of the Chartered Insurance Institute. After that, he specialised in the marketing and sale side of insurance. In 2010, he started working at Swan Insurance to launch their individual units. He has been responsible as Manager in Sales and Development to set up all different sale channels and product development for Swan Insurance's retail business.

The third interviewee was Mr. Jason Siew, Assistant Manager in Distribution and Partnership at La Prudence. He started his career in the banking sector. He has been working in the insurance industry for more than eight years and mainly in the investment for insurance and loans. For the last four years, he has specialised into life insurance but mainly for 'Bancassurance'.

The last interviewee was Mr. Devesh Biltoo. He is the Chief Executive Officer and Executive Director of Quantum Insurance. He has eighteen years of experience in the insurance business. He started his career in health insurance and then gradually moved to general insurance. He is qualified as Chartered insurer from Chartered Insurance Institute, from the United Kingdom. He was the head of underwriting at Mauritius Union, one of biggest insurers in Mauritius. After working for fifteen years in traditional insurance market, he joined Quantum Insurance where they started the development of the business in 2015 and started operating in November 2015 as an online and direct insurance company.

4.2 Analysis

4.2.1 The insurance industry

The nature of the Mauritian insurance industry

To understand the nature of the Mauritian insurance industry and the possible incidence on disruptive innovation, the interviewees were asked to provide an assessment of the current insurance market. Mr Biltoo, from Quantum Insurance, described the insurance market as a highly intermediated market driven by brokers. The latter also stated that the insurance market in Mauritius has not really evolved in terms of the offerings and market positioning of the different players. The market is not very sophisticated, according to him. He also observed that, in the last ten years, there has been a consolidation among several insurance companies. Mr Siew, from La Prudence, stated that the progression in the insurance market has been very slow despite the fact that one major insurance company, which previously held 70% of the life insurance market, was closed down by the government in 2014 because of an alleged Ponzi scheme. Mr Aliphon from Swan Insurance expressed the view that the insurance market has not developed that much in terms of products and capabilities though there is some change. He added that the insurance companies are overall still very traditional in their approach. Mr Aliphon, also described the market as a price driven market whereby brand loyalty is an important factor for customers of the top four brands. Mr Devalet, from Metropolitan Life, noted that the insurance industry is one of the key sectors contributing to the Gross Domestic Product of Mauritius. He stated that there is an organic growth in the insurance market, but he is also of the view that the insurance industry is a bit traditional in Mauritius.

Knowledge of disruptive innovation

Three out of the four respondents stated that they have heard of the term disruptive innovation. When asked to define the term, none of the respondents could give a complete or satisfactory definition of ‘disruptive innovation’ even though they have shown a certain degree of familiarity with the subject matter throughout the interview. All of the respondents are of the view that disruptive innovation has not really taken place in the insurance market in Mauritius in the last twenty years but they all pointed to the recent entry of Quantum Insurance into the market as an example of a possible disruptive innovation. Mr Biltoo defined disruptive innovation in the following terms -

> *"disruptive innovation is obviously an innovation or a way of doing business which is transforming the way the customers would look at its current experience.*
> *[…] the key essence of the disruptive model is first it gives you productivity gains and efficiency within your operations. Once, you've ensured that you really have a lean and great model, then the model is about scalability."*

Mr Siew defined disruptive innovation as an '*innovation that creates a new market*'. He cited as an example the digitalisation process at La Prudence whereby they are trying to reach out and attract millennials and the generation Z. He also referred to the concept of bancassurance as a disruptive innovation in the insurance industry. Bancassurance is a new cross-selling concept in the Mauritian market whereby insurance policies are being sold via banking institutions and La Prudence has made tremendous market share gains in that area. Both Mr Aliphon and Mr Devalet were unsure of the definition of 'disruptive innovation'. However, they both associated disruptive innovation with technology and digitalisation. Mr Devalet went on to say that "*that disruptive innovation is a new challenge which applies to the insurance sectors, how they would do the business*". Mr Aliphon referred to artificial intelligence and online technology.

'Quantum Insurance' as a disruptive innovator

All the interviewees described Quantum Insurance as a disruptive innovator since the latter has adopted a low-cost approach and, unlike its competitors, Quantum Insurance does not rely on intermediaries - it sells its insurance products directly to the customers online. The various statements of the interviewees were qualified because the effect of disruption has not so far resulted in the displacement of established insurance companies.

Mr Siew predicted that Quantum Insurance will be driven out of the market very soon because of the consumer culture and the risk or high loss ratio. Mr Aliphon was of the view that many customers still use the phone during the purchasing process and are not acquainted to online purchase. Mr Devalet was equally pessimistic about Quantum Insurance's eventual success because, according to him, the Mauritian market is not ready for online purchases and the customers do not have sufficient trust to purchase insurance products online.

Consumer behaviour as an inhibitor

Two of the interviewees held the view that disruptive innovation has not yet happened in the insurance industry over the last twenty years mainly because of the customer behaviour. For instance, Mr Biltoo is of the view that technology adoption in the insurance market has been rather slow in comparison with the penetration of mobile technology in terms of mobile phone subscriptions and smartphone use. The difficulty in adopting the latest technology and making online purchases are two reasons put forward to explain why disruption has not happened. For Mr Aliphon, the purchasing habits of Mauritians and price sensitivity are explanations why disruption had not yet occurred. In his own words, Mr Aliphon stated that Mauritians do not have a culture of self-service and they like to be served instead in a face -to-face interaction. The latter stated the following -

> *"They like to have someone do things for them rather them doing things by themselves…. But what yet to happen, Mauritians are quite price sensitive, they always tend to think that online may be not the best price, they believe that having someone to talk, they can negotiate the price."*

Mr Aliphon also had this to say -

> *"The Mauritian has no trust to do 100% online transaction. Quantum has realised that, they do not just transact online but also via telephone. Most of their sale was done via phone rather than purely via online. You can of course get the quote online. That is what I saw as a disruptive innovation in Mauritius for the last 20 years. "*

Mr. Devalet referred to the consumer understanding of insurance matters as a factor that impact disruptive innovation in the insurance industry. Mr. Aliphon, on the other hand, stresses on the importance and the need to educate consumers on risks that they consider so remote and insurance products they initially would not consider until there is a disaster like a flash flood. Mr. Aliphon summarised the uphill battle in those words - "*We are trying to educate the client to transfer the risk. It was one of a fight for sellers like us to change their minds*". Mr. Siew, from La Prudence, saw the consumer behaviour as an explanation why disruptive innovation is not seen as a threat by existing companies. He said - "*Mauritian culture tends to stick to the existing companies*." However, he sees the change of mindset in the younger generation as a key factor that could impact disruptive innovation.

Pricing and its effects

Mr. Aliphon, from Swan Insurance, stated on a few occasions that the Mauritians are price sensitive when it comes to insurance products. This mostly concerns compulsory insurance policies like motor vehicle insurance. He also added that the competition among insurers is aggressive as far as pricing is concerned. Mr. Devalet, from Metropolitan Life, made the same observation about the price driven competition among insurers. He stated that the competition among insurers is only focused on pricing rather than innovation. The other interviewee, Mr. Siew, made the similar observation about prices driving the competition. He also added that the low pricing makes disruptive innovation possible and cited Quantum Insurance as an example. According to Mr. Siew, pricing is the main factor that determines the business model at La Prudence. He gave an example how La Prudence pursued a strategy of lower prices for three months until it could not sustain the loss ratio anymore. Mr. Siew also pointed out that Quantum Insurance was able to offer lower prices compared to its competitors because it bypassed all the intermediaries with its online direct insurance – thus Quantum Insurance prices were 50% lower. However, he questioned whether Quantum Insurance's low-cost model and disruptive innovation are really working. For Mr. Siew, when Quantum Insurance would be faced with a large number of claims, the latter would not be in a position to satisfy all those claims and he mentioned that Quantum Insurance is not performing very well this year.

Mr. Biltoo considered that Quantum Insurance's ability to offer competitive prices was the result of the productivity and efficiency gains introduced by the technology. The fact that Quantum Insurance offers direct online insurance, instead of relying on brokers, was also the reason that enables it to achieve a lower pricing. He also highlighted the fact the other insurers reacted to the Quantum Insurance's offering by lowering their prices within six to eight months after Quantum Insurance entered the market. He conceded that Quantum Insurance's approach has not affected the market shares of the other major insurance companies but he considered that those companies are suffering from a lower profit margin because their operating costs have not changed and they are simultaneously reducing the prices of their products.

Mr Biltoo is also of the view there is a lack of regulation to promote transparency in respect of pricing. He deplores the absence of a TCF (Treating Customers Fairly) initiative. He stated that "*If you haven't got the regulatory framework that promotes or encourages transparency from the market perspective for people, for the consumer to be aware of what is the best practice, what is the best pricing, the best way of customers being treated fairly, the disruptive model is impacted.*"

4.2.2 Companies and disruptive innovation

Business model to bring disruptive innovation

Each interviewee highlighted the key determinant of the business model adopted by their respective companies. Out of the four companies, only Quantum Insurance has a clear disruptive model based on disintermediation and direct online sale of insurance policies. Unlike Quantum Insurance, the three other companies still rely heavily on intermediaries such as sales agents and brokers.

For Mr Biltoo, the pursuit of the disruptive model does not suit well pre-existing structures. He is of the opinion that a disruptive model cannot co-exist with another business model like the ones adopted by the incumbents, because of the rigid structure and high cost operations. In essence, he explained that -

> *"If you are an existing service provider and you want to go into a disruptive model approach. You can only get 2 approaches to do– either you do what you call an*

inorganic way of growing which is you buy an insurance company that is already technology driven or else you got to revisit your whole operations or your whole structure. "

According to Mr. Aliphon, Swan Insurance intends pursue disruptive innovation and to that effect it has acquired shares in a start-up software company. He also added that Swan Insurance wants to focus on insurance sales and development rather than administration – hence if certain processes have to be outsourced, they will be outsourced and the internal processes have to be optimised. For La Prudence, the strategy is digitalisation of the sales, underwriting process and even the customer service. This also involves leveraging on Artificial intelligence by bringing chat bots. However, the key factor that determines the business model is competitive pricing. At Metropolitan Life, the answer from Mr. Devalet did not really shed light on the actual strategy and business model to bring disruptive innovation.

The conglomerate effect

According to Mr. Devalet, most of conglomerates already have a subsidiary which is in the insurance business; it is therefore unlikely that they will invest in a new insurance company. For those insurance companies who are not in a conglomerate, they do not feel the need to invest because of the technical complexity of the insurance business.

Mr Biltoo also reflected upon the effect of those conglomerates on the managerial and strategic decisions within the insurance companies because the key decisions are usually made by the parent company. According to Mr Biltoo, the top five insurance companies in Mauritius are part of conglomerates.

4.2.3 Structure, size and level of competition

Organisational structure

Out of the four respondents, only Mr. Siew thought that the current structure and decision-making process at his company does not have an impact on the process of disruptive innovation. He explained that La Prudence has created a new unit called 'Business Capture' which falls under

Business Development department. The new structure allows direct interaction with the customers and reduces the decision-making process whereas previously a simple application had to go through different channels before a decision was reached. He also stated La Prudence is applying different models of change management among which the McKinsey's and Kotter's model. Mr. Siew, however, concedes that the new structure is giving rise to a malaise and frustration among certain members of staff because of the resistance to change.
Mr Biltoo shared the view that the structure and size of Quantum Insurance does have an impact on the process of disruptive innovation. The organisational structure appears to be an advantage for Quantum Insurance because it has been designed to allow optimum use of resources, better costs control and scalability.

Mr. Aliphon said that the structure and decision-making process of his company negatively impact on the process of disruptive innovation. The latter expressed doubt as to whether the current structure at Swan Insurance is an advantage, because it is too conventional, he added. Mr. Devalet, on the other hand, thought that the bigger size of a company is an advantage inasmuch as the company would have more resources to allow it to innovate.

Competition and copycat effect

A question was put to all interviewees about the level of competition in the insurance market in order to gauge whether competition is a driving force of disruptive innovation or innovation at all. As stated above, all the respondents concurred with the fact that the competition among insurers is mainly price driven. When questioned about whether competition is very aggressive in the insurance market in Mauritius, Mr. Aliphon replied *"No. They are more aggressive in terms of prices, not in terms of innovation.".* Mr. Devalet, for his part, stated the following:

> *"We have not yet been subject to disruptive innovation and so we cannot provide examples. However, the practice is to assess the innovation that is being brought by a competitor and try to improve on the offer being made available to the market.*

[..] At Metropolitan Life, there is a strategy is called "Roadshow" ... to reach to more customers, [..] This strategy didn't exist before, this was something new. Some competitors saw this method working; they tried to copy it even though the copy isn't as good as the original one. "

In reply to another question, Mr. Devalet also mentioned that -

But from the perspective of innovation purely, I can expect that will be ongoing. If we want to progress, we also need to follow the trend of innovation or trend of the way business is being done.

Mr. Siew is of the view that the competition is mostly aggressive among Swan Insurance, SICOM and Mauritius Union. Mr. Siew also observed that insurers in Mauritius do not really innovate but according to him they "*just follow the trends [..]. It is not an innovation; they are just copying from somewhere else.*" Mr Biltoo stated that the competition in the insurance market is very aggressive but this does not explain the lack of disruptive innovation. He explained that there has been no disruptive innovation because of there is a highly intermediated market which is not compatible with a disruptive model like the one adopted by Quantum Insurance. In his own words,

"[...] The lack of disruptive innovation is because it is highly intermediated market where an insurance company has the heavy legacy of intermediated business. It is the legacy issue that they are having that can't get them to embark on the disruptive model. Because as I explained to you, such a disruptive model can't coexist with the legacy of intermediated and brokers-driven business on the retail side"

He further stated that "*since we [Quantum Insurance] launched into the market, the other companies have reacted by dropping their prices. They have reacted also by trying to bring in some applications, insurance applications, mobile apps.*"

Market size

Three of the interviewees made numerous references to the market size. The market size has certain implications on the process of disruptive innovation and the motivation of investors. Mr Biltoo argued that -

> "*For sure, the retail market is very small, definitely this is a very small market and the investment does not commensurate with what is the market potential from a retail side."* He continued - "*a start-up disruptive model will come to Mauritius if it has a project of expansion need. In some ways, like we did with Quantum you create the model here and you replicate it to other territories. So this is more of an expansion model"*

In response to a question about resource allocation, Mr. Devalet remarked that -

> "*[..] Mauritius is a small market and innovations are not that that big. Let's say we have to launch a new product and it costs around 500.000 Mauritian Rupees, you need to ensure that you can at least break even. There is innovation but I don't expect to have big changes going forward because of the small market ...*
>
> *In Mauritius, there are compulsory insurance which are motor insurance or when taking a loan from the bank, we will need a life insurance or travel insurance. It is a standardised format and there is not much thing to innovate and it stayed the same for so many years. The rest of non-compulsory insurance depends on the will of clients, so insurers have to fight to make business but of course they need to be quite attractive in the process to be able to reach the market."*

Mr. Siew explained that La Prudence provides learning and networking opportunities for its staffs by sending them abroad for training and to keep in touch with latest developments in Insurtech and to find out what can be done or can be introduced in Mauritius. Mr. Siew stated that "*We [La Prudence] can't introduce everything that they do in abroad because we are the small market*". To a separate interview question, Mr. Siew addressed the question of motivation of investors to invest in a small market. He stated -

> *"Everything in Mauritius is networking. It is a question of whether the investor wants to invest in Mauritius where it has a lot of corruption and a small population size. You may*

can argue that Singapore is also just the same population as us but I am sorry that we can't compare with them."

4.2.4 Motivation

Motivation to pursue disruptive innovation

Are the managers and companies motivated to pursue strategies for disruptive innovation? That question triggered even more questions than answers. Mr Biltoo stated that the level of motivation will depend on how motivated managers or the business leaders are to embark on disruptive business models. For Mr Biltoo, the fundamental question is how ready are the managers to confront or challenge their own organisational structure of the company to bring in that disruptive model. If the company is a start-up, the managers or business leaders will be willing to try a disruptive model. But for an incumbent which has to re-engineer its structure, it depends on the willingness of the shareholders to take such risks.

Mr. Devalet took the view that the motivation would depend on the size of the company and its market share. The bigger the company, the less motivated it shall be to innovate. For Mr. Aliphon, managers and companies have to be motivated to pursue such strategies because sometimes it is a matter of survival rather than mere motivation. Mr. Siew, equally considered that managers ought to be motivated even if now they are not because disruptive innovation is the future.

Perception of threat

Do large established companies perceived disruptive innovation as a threat? Mr Biltoo replied that for now, the disruptive innovation is not seen as a threat. He reasoned that since the disruptive model does have affected the incumbents' respective market share it is not perceived as a threat. The disruptive model is only affecting their costs of operations. Mr. Siew concluded that the disruptive innovation is not perceived as a threat for now. The first reason he attributes it to the Mauritian culture whereby Mauritians tend to stick to existing companies rather than choosing new ones. Secondly, he also thinks that Quantum Insurance will not be able to survive another year in the insurance market. In contrast, Mr. Devalet thought that innovation will always be perceived as a threat. Mr. Aliphon's response suggested that Swan Insurance is keeping an eye on the disruptive innovation but they also see the opportunities that come with it.

> *"It's on our radars […] if it is brought on by a competitor, yes it's a threat. if there is an idea that we could implement ourselves, it is less a threat and more an advantage. I would say both: it can be a threat and it can be an advantage as well. The concept of disruptive innovation is more, for me, an advantage, and more a good thing than a bad thing. That's the way forward, that's how we'll have to do things and see things."*

4.2.5 Competence, ability and knowledge

Recognising signs of disruption

The respondents were asked how well managers can recognise signs or patterns of disruptive innovation. The answers were different. One interviewee held the view that since Mauritius is a very small island and things are known quickly. At the other end of spectrum, Mr. Siew described a situation whereby it took the competitors one to two years to figure out which company was grabbing their shares of the insurance market. For Mr. Aliphon, the fundamental question is whether those managers know what disruptive innovation is about in order to be able to recognise them.

Response to a potential disruption or concurrent disruptive strategy

Disruptive innovation is an ongoing process and the dynamics of which can change by the response from the incumbent. Mr. Aliphon stated that Swan General Insurance has been in existence for 160 years. As such it has a strong brand but also a legacy structure. To pursue disruptive innovation, Swan Insurance has acquired a start-up company. According to Mr Biltoo, within six to eight months after Quantum Insurance has launched, the other insurers started reacting by lowering their prices, introducing mobile applications and communicating more through social media. Upon being asked whether companies or managers implement strategies to counteract threats of disruption, Mr. Siew stated that the latter are 'not really' implementing such strategies because there is no perception of threats. Mr. Siew further commented on the advent of Quantum Insurance and opined that it may soon disappear due to a high loss ratio on insurance claims.

The fact that Mauritian customers have strong brand loyalty explain why Quantum Insurance's attempt at disruptive innovation may not be perceived as a threat. At the same time, La Prudence is pursuing a strategy of disruptive innovation by bringing changes to the supply chain management and digitalising everything. La Prudence will also be betting on Artificial Intelligence or introducing chat bots to handle customer queries.

Mr. Devalet, stated that the motivation of the different companies to pursue disruptive innovation will depend on the size of the company and their market share. The bigger the company, the less motivated it will be to innovate. Mr. Devalet is of the opinion that disruptive innovation will always be seen as a threat. The standard practice is to assess "the innovation that is being brought by a competitor and try to improve on the offer being made available to the market."

Reaction time

All the interviewees were asked the following question -

> How well do you think managers/companies are able to recognise patterns /signs of disruptive innovation happening in the industry?

In replying to the above, three of the interviewees, referred to a period time in assessing the manager's or the company's ability to recognise patterns or signs of disruptive innovation in the insurance industry. For instance, Mr. Siew considered that it takes one to two years to recognise signs of disruption. Mr Biltoo drew from the experience of Quantum Insurance and stated that the competitors started reacting by dropping the prices of their products six to eight months after the launch of Quantum Insurance's offerings. Mr. Devalet simply stated that "Mauritius is a small country, everything is happening, we can know it rapidly."

4.2.6 Technology

Adoption of technology

All interviewees listed technology as key factor impacting disruptive innovation. The challenges posed by the adoption, or non-adoption, of technology could be seen from three different perspectives: from the point of view the insurance companies and their higher management of the insurance and that of the customer base. It has already been highlighted above how the customers have not really embarked on adopting new technologies for insurance transactions in Mauritius and would still prefer to use the phone to call the insurance companies.

There is an indication that insurance companies are using technology internally, mainly to reduce their operational expenses and increase efficiency. Mr Biltoo observed that insurance companies are using technology in half-baked manner and therefore not availing themselves of the opportunities for optimisation. Also, he noted that a disruptive model calls for the optimum use of technology. What is currently happening, he said, is that insurance companies are using technology to drive down the operational costs rather than delivering a different form of service to the end user. As for Quantum Insurance, there has been massive investment in the technology and they even had to resort to skilled software developers from Israel to build the technology for the online direct insurance. Mr. Aliphon stated that technology is part of Swan Insurance’s business strategy but the adoption of technology is not yet driving disruptive innovation into the market because most insurance companies have invested in many things other than technology and they are still lagging behind in terms of technology. Mr. Siew took the contrary view and said that adoption of technology in the insurance industry is driving disruptive innovation and he indicated that La Prudence values technology as part of their business strategy. Technology makes business easier, it is less prone to errors and saves time in processing operations, he said. For instance, if La Prudence receives one thousand proposals from the State Bank of Mauritius, they would be able to process all proposals in two days thanks to the technology, whereas it would have taken them seven to eight days previously without the technology. Mr. Siew also found that the insurance companies are starting to adopt new technologies and it involves mainly Swan Insurance and Mauritius Union (the parent company of

La Prudence). As for SICOM, he does not see any incentive for the latter to invest in technology since it relies heavily on government business.

It is also interesting to note that La Prudence also sends its staffs for training in South Africa or Malaysia where they would have the chance to learn about Insurtech and have exposure to other insurance markets. As for Mr. Devalet, he insisted that technology is a must to deliver insurance products and services. His first point was that technology is needed for internal process and, for marketing, technology is important especially through the social media.

4.2.7 Infrastructure

Mr Biltoo was the only interviewee that who identified 'network connectivity' as a factor that could impact upon disruptive innovation and he called for the opening up of the internet bandwidth. During the interview, Mr Biltoo, has laid emphasis on the user experience and the service innovation.

4.2.8 Policy decisions and Regulations

The impact of regulations cannot be overstated – it affects entry on the market, consumer choice, pricing practice and contractual relationships between insurers and the policyholders. When the interviewees were asked to rank the factors impacting disruptive innovation, three of them cited regulations as a factor among their top three picks. The four interviewees identified regulations as a current barrier to disruptive innovation. Moreover, the interviewees were unanimous to say that there are no policy decisions or fiscal decisions which are encouraging disruptive innovation in the insurance industry.

The only example of a regulation encouraging disruptive innovation came from Mr. Siew. He identified the "free choice of policy" introduced by the Mauritian Government as an enabling factor of disruptive innovation since clients have the possibility to choose their policy and the insurer when they are purchasing through a banking institution. Prior to the "free choice of policy", some banks were only proposing one insurer with which they have partnered and the customer did not have much of a choice. Mr Biltoo's views on regulations and disruptive innovation were aptly summarised in his statement -

> *"I don't think the current regulatory framework is ready to really accommodate new disruptive models"*

He pointed out that even though Mauritius is trying to get into Fintech, and added that "*there's no fiscal incentive, there's no regulatory incentive in terms of IT asset recognition, in terms of accounting or solvency wise*". He further stated -

> "*The goodwill of a company, of any business, if it is a disruptive model you build the goodwill from the technology. If the technology from an investment perspective does not have recognition in the balance sheet as an asset, then you're not really valuing the goodwill of the business.*"

When asked whether there are certain policy decisions or fiscal decisions which are discouraging or preventing disruptive innovation, Mr Biltoo and Mr. Aliphon gave a few examples. Mr Biltoo referred to 'outdated' laws like the Napoleon Code which regulate contracts and the Electronic Transactions Act that are still applied in Mauritius even though they are not in line with the technological progress. The Napoleonic Code was enacted in the 1800s. Mr Biltoo also questioned whether the Insurance Act is up to date to take into account online insurance transactions. Mr Biltoo also remarked that, prior to the launch of Quantum Insurance; the local regulator came on a study tour to observe how online insurance was actually working in order to prepare the guidelines for direct online insurance. At that point there were no guidelines for online insurance in Mauritius. However, according to him, the guidelines issued by the regulator afterwards did not address all the regulatory issues. For Mr Biltoo, the regulations and the regulator are not keeping pace with the changing business and technological environment.

As for Mr. Aliphon, he mentioned that there are consumer protection laws which stipulate that marketing campaigns for insurance products must be reviewed and approved by the Regulator – a process which takes several weeks and does not allow an insurance company to react quickly to competition. Mr. Devalet finds that regulations have an impact on disruptive innovation in so far as the regulations limit entry to the insurance market.

4.2.9 Human Resources

During the course of the interviews, the respondents made the link between human resources and technology. For Mr Biltoo, the IT human resource is critical to the business of Quantum Insurance. Mr. Aliphon, referred to the acquisition of an IT start-up by Swan Insurance. Mr. Siew talked about La Prudence's plan to invest in the education of the staff on technology and, the recruitment over the next five years of young people who are already in technology.

Local v/s foreign skills

The interviewees were asked whether there is sufficient competence (managerial, technical or legal) to bring disruptive innovation in the current market. Three of the interviewees stated that there was sufficient competence. However, it is noted that when it comes to technical skills like programming there is a need to resort to foreign expertise. One example is Quantum Insurance which could not find the local skills to develop the IT backbone for its online insurance. Regarding La Prudence, they established a partnership in Cape Town, South Africa as they need experts from abroad with experience in similar innovations or for exchange training. Mr. Devalet pointed out that insurance is a technically complex business and there is a need for the right skilled person. He mentioned that prior to selling a new insurance product locally; it has to be vetted by an actuary who often happens to be based in a foreign country.

Age Group

It is interesting to note that three of the interviewees made the link between the managers' understanding of disruptive innovation and the age group to which they belong. Mr. Aliphon pointed out that most senior managers in the insurance companies are quite old and the latter tend to do things traditionally or they don't know how to do things differently. Mr. Aliphon also made a general statement about Mauritius not having enough young minds with international exposure and experience, which therefore constitutes a threat to Mauritius. At La Prudence, most of the managers are within the age group of 30 to 40 years old, and according to Mr. Siew, they are pretty much millennial and they have no difficulty understanding the concept of disruptive innovation. Mr Biltoo went further to lay down the idea that the success of the disruptive model depends on whether the staffs are adopter of the technology. According to Mr Biltoo,

> *"When you got a disruptive model, you've got to make sure you've got a very young and dynamic staff base, people who can recognise themselves in the technology. If you bring in people who are in the industry with 20 or 30 years of experience with a previous way of doings things or a traditional way of doing things, it is difficult to get them to embark onto disruptive model"*

Mr. Siew also underlined the difficulty that the older generation of employees face when it comes to technology and he stated "*This is why generation Z will be the boost of disruptive innovation I think*".

4.2.10 Culture

Resistance to change

In reference to the older employees in the insurance industry, Mr. Siew had this to say -

> *"The mindset itself. We have seen that they don't want the change. Over 45 years old, it is difficult for them to change. They have been working with paper for so many years. Now they have to work on computer which is difficult for them and they are very slow on that."*

Innovation culture

Is there an innovation culture within the insurance industry? The answers varied. For Mr Biltoo, there is no innovation culture and, in contrast with the banking sector, the insurance industry as a whole is lagging behind. Mr. Devalet stated that there is a moderate innovation culture within the local insurance industry. For Mr. Siew, there is a copy culture rather than an innovation culture, whereby most insurers are just following the trends. The latter stressed upon the fact that the innovation culture does not spread throughout the whole insurance industry but it is rather limited to a set of three companies – Swan Insurance, Mauritius Union and Quantum Insurance. Mr. Aliphon merely stated that the innovation culture is starting. There was no explanation from the interviewees as to why there is no innovation culture.

When it comes to the form of innovation that insurance companies tend to value? Again, the answers varied. According to Mr. Devalet, companies tend to value innovation that has a direct impact on sales and/or their respective brands. Mr. Aliphon finds that insurers tend to value innovation in terms of product features or loyalty programmes. Mr Biltoo found that there is only product innovation but no service innovation.

Management culture

The four respondents expressed different views on whether the management culture is an enabling or disabling factor. Mr Biltoo and Aliphon are of the view that the management culture is a barrier to disruptive innovation for different reasons. Mr. Siew answered that the management culture is not a barrier to disruptive innovation. Mr. Devalet finds that the management culture is an enabling factor although the basis of that answer was not totally clear.

One of the reasons put forward to explain why the management culture is a barrier to disruptive innovation was that that management culture of the big insurance companies is tied to the management of their parent holding company. Mr Biltoo explained this in those terms -

> *"If you look at the first five insurance companies in Mauritius, they form part of a captive holding. If they are part of a captive holding, and then obviously the strategy is based onto the captive major shareholding deciding on what strategy they want to embark upon*."

Mr. Aliphon suggested that the senior managers belong to an older generation and they may unknowingly be barriers to disruptive innovation. He also mentioned the fact that the decision-making process follows a top-down approach whereby the senior managers and the CEO take decisions for staff at the lower level to implement.

4.2.11 Access to Capital

Capital as barrier to entry

Three of the interviewees explicitly identified the initial capital investment as a barrier to entry into the Mauritian insurance market. According to Mr. Siew, some 25 Million Mauritian Rupees (~ 625,000 Euros) is need as a starting capital. Mr. Aliphon explained it is not easy for a new player to enter the insurance market and any company entering that market has to be financially solid. Mr Biltoo also identified the massive capital investment as a barrier to entry and also pointed the finger at the current regulatory framework which does not provide any recognition for the IT investment in the accounts of a company.

Mr. Devalet suggested that the heavy regulations limit entry onto the insurance market. In answer to another question, he did state that a huge amount of money was needed to start a company – without necessarily pointed out that it was a barrier to entry. Mr. Siew also suggested that the fact that Swan Insurance, Sicom and Mauritius Union have been there for more than seventy years, they have enjoyed a reputation as a strong brand which a new entrant will not have.

Ability to raise capital

When asked whether it is easy or difficult to raise money from venture capital in Mauritius, two of the interviewees took the view that it is not easy for a new company to raise such capital. In response to a subsequent question, Mr. Aliphon stated that raising money can be more difficult for a new player in comparison to an established business. Mr. Siew took the view that the ability to raise money is a matter of networking and he further asked the question whether an investor would be interested in investing in Mauritius where there is a lot of corruption and the population size is so small.

Does the ability of a company to raise capital impact on disruptive innovation or the response to an impeding disruption? That question triggered mixed answers. Mr. Devalet and Mr. Siew replied that the ability to raise capital does impact on disruptive innovation. Mr. Siew noted that, without money, it is more difficult to bring digital innovation without money. Mr. Aliphon, thinks that the ability to raise money does not impact upon disruptive innovation or the response to an impending disruption.

CHAPTER 5 DISCUSSION, CONCLUSIONS, RECOMMENDATIONS

5.1 Discussion

In this section, there shall be a discussion of the findings from the interview and answers to the research question. To achieve a useful discussion, the findings will be compared and contrasted to the literature review. The main research questions are -

1. Is there disruptive innovation in the insurance industry in Mauritius?
2. What are factors enabling disruptive innovation in the insurance industry in Mauritius?
3. What are factors discouraging disruptive innovation in the insurance industry Mauritius?

5.1.1 Is there disruptive innovation in the insurance industry in Mauritius?

The literature review highlights that disruptive innovation is a process - a process which starts when the new entrant starts offering a product in a market ignored by the incumbent (Christensen, Raynor and McDonald, 2015). Identifying a disruptive innovator or a disruptive innovation does not come without its difficulty for a number of reasons (Christensen, Raynor and McDonald, 2015).

The first reason is that the definition of term ‘disruptive innovation’ itself has been challenged by some academics and the term has been used in context where it was not suited. Secondly, the distinction between ‘sustaining’ and ‘disruptive’ innovation may not be very clear in the initial stages of disruption. The literature review has highlighted the need for more a constrained definition for ‘sustaining innovation’ and “disruptive innovation” (Michael R. Weeks, 2015). Even the father of the theory of disruption who initially stated that the Apple’s iPhone was a sustaining innovation later called it a disruptive innovation since it was a disruptor of the laptop rather than smartphones. Another example of the difficulty in identifying disruption may be the classification of Uber as a disruptor. Whilst many tend to describe the ride hailing service, Uber, as a ‘disruptive innovation’, the author of the theory stated that Uber does not qualify as a disruptive innovation (Christensen, Raynor and McDonald, 2015).

The third difficulty is the availability, accuracy and interpretation of data. This has been the crux of Lepore's argumentation about whether the theory of disruption was in fact well founded because according to Lepore the handpicked cases were not fully accurate or contextualised.

All of the interviewees identified Quantum Insurance as a disruptive innovator. It was observed that the interviewees had some difficulty in explaining the term accurately. The reasons put forward by the interviewees for labelling Quantum Insurance as a disruptive innovator were -

1. the low cost of its insurance product;
2. the online direct insurance service; and
3. the disintermediated model whereby brokers are no longer needed.

None of the interviewees described the quality of the direct online insurance product. There were comments about the ease of use of the product or online service. They merely stated that Mauritians are not used to the purchase of insurance online and that many customers are still using the telephone to complete insurance transactions.

Low end foothold or new market foothold

The personal insurance market targeted by Quantum Insurance is not a new market at all. For instance, the motor vehicle insurance market involves insurance which is made compulsory by law. However, the personal insurance market is one which has been dominated by an inflated pricing because of the intermediated model adopted by the insurer so far. Also, it is a market that relied on face-to-face interaction for purchase of insurance products. It can be argued that Quantum Insurance is providing for the low end of the market where there is a need for low-cost insurance products. In the traditional market where the needs of the customers were overshot – for example, the customers were getting the benefit of face-to-face interaction and insurance advice from brokers.

Is the product or service from Quantum Insurance of inferior quality or less complex?

One of the key aspects of the disruptive innovation is that the entrant introduces a product or service which of inferior quality, less complex or easier to use than that of the incumbents'. The key difference between Quantum Insurance's service and that of its competitors lies in the fact the Quantum Insurance's underwriting process is an automated rule-based process with minimal human intervention whereas its competitors rely on brokers and intermediaries to service the customers. The purchase from Quantum Insurance is made by self-service in contrast to its competitors. Mr Biltoo described the direct online insurance as a simpler service whereby the person sitting at home can purchase the insurance without any hassle, without a phone call and without visiting an office to finalise the transaction.

The answer to the research question is that there is a process of disruptive innovation that has started.

5.1.2 Factors enabling disruptive in the insurance industry in Mauritius

Technology and the adoption of technology

Technology is a core part of a disruptive innovation inasmuch as it allows new entrants to follow the disruptive path and move to a mainstream market without the cost structures and managerial inefficiencies of the incumbents (Christensen, Raynor, MacDonald, 2015). The findings support the view that companies are indeed using new technologies but primarily to drive down the cost of their internal operations. However, as rightly pointed out by Mr Biltoo, the competitors of Quantum Insurance are using technology to reduce the operational costs but without transforming the end-user experience and that the use of technology in that way does not enable disruptive innovation. The two cases ought to be distinguished because one seeks to bring cost efficiency and the other is a clear pursuit of a disruptive strategy.

Christensen, Raynor & MacDonald (2015) stated that it is very rare that a technology or a product is inherently disruptive. Therefore, the question is how does technology enable disruptive innovation in the Mauritian context. The answer that emanates from the findings in the case of Quantum Insurance is that the technology allowed the disintermediation, which allowed Quantum Insurance to offer lower priced products in the low-end of the market. Indeed, Quantum Insurance could offer prices as much as 50% lower since it got rid of the brokers and other intermediaries. Secondly, the technology keeps the operations lean and cost effective without a large workforce. Thirdly, the technology provides a different, simpler and time saving experience to the end user. Not much detail transpired about the type of technology used at Quantum Insurance or its competitors, whether is it proprietary technology or open source.

Whilst it has been noted that there is a positive relationship between technology and the disruptive innovation, it turned out that, in a relatively small market like Mauritius, the development of the new technology may come at a higher cost and adoption of the technology may be slower. It may legitimately be asked whether there is an underlying pattern or cycle whereby there is slow technological progress, or lack of new technology, because of a higher development cost and, in turn the lack of new technology reinforces certain consumer habits which makes it later difficult for certain consumers to readily adopt new technology, thus impeding on the process of disruption. At this stage, there is not enough data to explain why a lot of Mauritian consumers would still prefer a traditional face-to-face service rather than an online self-service.

Demographic change

Nicoletti (2016, p.7) pointed out that most insurance companies which have been static for a while are now under pressure of four disruptive factors: urbanisation, technology, demographics, and globalisation. The findings from the interviews seem to support the view that demography is an important enabling factor, more precisely demographic change. This has to be understood from three different perspectives: the changing customer base, a younger workforce, and the effect of the demographic change on technology adoption and the management structure. The demographic change is an important but not a stand-alone factor. It has an intricate relationship with the technology, the era of change, the changing needs and mindset of those adopters and developers of the disruptive technology.

Mr Biltoo has been adamant that when an organisation adopts a disruptive model it needs young, dynamic workforce who can adopt the technology as compared to staff with 20 or 30 years of experience who find it difficult to embark on new technologies. This observation was echoed by Mr Aliphon who described the effect of an older and traditional management in the sense that it gets in the way of innovation. The recruitment plans of La Prudence in the next five years also suggest that a younger generation of staff is important in the process of disruptive innovation, if not mere innovation. The findings also show that the habits of the Mauritian customers are hard to change. In the words of Mr Aliphon, the Mauritians are not used to self-service and this was confirmed by Mr Biltoo who stated there is still a number of people who are making phone calls for insurance transactions. There is an expectation that, as the demography changes, so does the class of consumers – thus a younger generation will more likely move towards online solutions and mobile technology which were not popular for the preceding generation.

This demographic change is an enabler of disruptive innovation not only because it means that there is a possibility of a new or low-end market foothold for new entrants but it also signifies potentially a new set of consumers, consumer behaviours, needs and expectations different from those of current customers in the high-end market.

Low Price

During the process of disruptive innovation, the disruptive product or service offered by the new entrant is frequently at a lower price compared to that proposed by incumbents. Lower pricing is not a determinant of successful disruptive innovation, but it is definitely an important enabling factor in the context of Mauritian insurance industry. Why? In their assessment of the insurance industry in Mauritius, the interviewees highlighted the fact the consumers of insurance products are very price sensitive.

The importance of the price sensitivity is explained by the fact that La Prudence and other competitors had to lower their prices in reaction to Quantum Insurance offerings six to eight months after Quantum Insurance launched on the market. It also explains why one of the key factors influencing the business model of the Swan Insurance, La Prudence or Metropolitan Life is pricing.

At this stage it is inconceivable that a new entrant offering a higher priced product may be successful in the long run in a very competitive price-driven market.

Strategy and Business model

During the course of his interview, Mr Biltoo stated on several occasions that the disruptive model adopted by a company cannot co-exist with another pre-existing legacy business model. This view seems to be supported by Christensen who advocates that in order for established companies to be able to bring disruptive innovation or respond to disruption, they should have a separate business unit with a separate business model. Even well-intentioned managers would not be able to bring about the disruptive innovation because of the existing structures within the established business.

The business model is a critical factor in enabling disruptive innovation. For instance, in the case of Quantum Insurance, there is a business model based on disintermediation, digitalisation, low cost insurance products and a scalable technology infrastructure. Or, in the case of Swan Insurance, it may involve acquiring or investing in a start-up.

5.1.3 Factors discouraging disruption in the insurance industry in Mauritius

Starting capital and access to capital

Capital has been cited as one of the top three factors discouraging disruptive innovation in the Mauritian insurance industry. The effect of lack of capital is more profound in that it is a barrier to entry in the insurance market.

All the interviewees stressed upon the importance of being financially solid to enter and remain in the insurance industry. As per the Insurance Regulations 2007, an insurer needs to maintain at all times a stated capital of 25 million Mauritian rupees (~ 625 000 Euros) and above. That means that the minimum starting capital has to be 625 000 Euros and above. That large amount of money excludes all the operating costs and initial investment in the technical development of the product, actuarial vetting and so on. Moreover, the operational complexity of an insurance business also commands high operational costs that many start-up companies cannot afford unless they are backed by venture capital money based on a very compelling business plan. For a start-up company to raise money in Mauritius is not an easy task. Mr Biltoo indicated that with the low interest rates from the banking institutions, some people may want to invest in start-ups. However, given the size of the Mauritian market, the level of complexity of the insurance business and the established price driven competition, the return for an investor may not appear to be interesting or worth the risk.

Without a doubt, the starting capital and access to capital are factors which limit entry into the market, inhibit upon the ability of a new entrant to successfully develop and implement a disruptive technology or product.

Regulations

The insurance industry is heavily regulated and the regulations definitely have a negative impact on the ability of a company to bring disruptive innovation. The regulations -

1. set the bar high for entry in the insurance market;
2. define how the industry players advertise their products;
3. determine the compulsory insurance;
4. set the reporting conditions;
5. define the competency standards of officers within the insurance; and
6. govern the contractual relationship between insurers and the policyholders.

Whilst all the laws apply equally to all insurance companies, it is evident that the most far-reaching consequences of regulations are that (a) they limit entry of innovative companies into the market and (b) discourages venture capitalists from investing in that market. Consequently, the legacy structures from incumbent companies will continue to dominate the market and define the customer experience. One can also argue that -

1. The nature of the insurance is one where risks are minimised. It does not fit well with uncertainty or unpredictability or disruption;
2. it is the responsibility of legislators to ensure that there is a sound and stable insurance system whereby maximum protection is afforded to the policyholders;

3. it is not the objective of the law to encourage disruptive innovation which can continually threaten the existence of insurance companies and diminish consumer confidence in the insurance; and
4. the law serves the interest of incumbents

The fact that regulations are not up to date with the digital reality is also of concern as it impacts negatively on the process of disruptive innovation. Mr Biltoo gave an example how regulators are lagging behind in terms or updating the laws or issuing new effective guidelines. For instance, the Mauritian regulator, the Financial Services Commission, started preparing its guidelines after observing how Quantum Insurance was working in practice. There are so many areas of development that are untouched or disregarded for now by the regulators, for example, crowd insurance.

It is worth pointing out that the research data does not indicate that there is a high level of disintermediation in the traditional value chain in the Mauritian insurance industry. A large number of operations are still concentrated within a single insurance company. It is hypothesised here that the bad effects of regulations on disruptive innovation in the insurance industry can be lessened by further disintermediation of the existing value chain and whereby start-up companies can focus on particular tasks with a disruptive model (Capgemini Efma, 2018, p.27). A start-up company which focuses on a particular operation may not be burdened with the excessive regulations which are applicable to an insurance company as a whole.

Market size

The theory of disruptive innovation was based on findings of Christensen concerning the US market which is a large and developed market. With a population of 1.2 million inhabitants, the insurance market in Mauritius has been described as a small retail market by three interviewees. The market size has an indirect effect on disruptive innovation but the effect does not go unnoticed. Indeed, the interviewees suggested that, because of the market size,

1. the return potential is not commensurate to the investment;

2. an investor may not be very interested in investing in such a market with uninteresting returns;
3. the cost of technical development may be higher because of a lack of skilled software developers;
4. there is a lack of interest to innovate or introduce new technologies;
5. what is done by a competitor can be known rapidly;

It is observed that the Mauritian market size is such that competitors compete in a very small pool of consumers and that it gives rise to the kind of competition that favours the incumbent at the expense of the new entrant and disruptive innovation. It is also observed that there is a vicious cycle in a small competitive market whereby -

1. a competitive activity is known very quickly;
2. there is a fairly rapid response to the competition;
3. the innovation introduced by a new entrant can be easily copied by the 'fast followers' and incumbents;
4. there are very few investment opportunities into a potentially disruptive innovator because the rewards seem so uninteresting;
5. due to the lack of investment, very few new technologies are introduced on the market;
6. the market, the customer experience and the customer behaviour are defined predominantly, or reinforced, by the legacy system from the incumbents;
7. the customers would keep buying insurance products the only way they knew or are accustomed to;
8. the incumbents continue to benefit from a higher degree of trust from consumers, because new companies may not last for long; and
9. the growth potential for a new entrant is limited or growth stalls rapidly.

For example, Mr Aliphon pointed out that disruptive innovation is more of an opportunity for a company like Swan Insurance. His rationale is that if there is an idea introduced by a competitor and that idea can be implemented by Swan Insurance, it becomes an advantage. The market size of the Mauritian insurance market privileges sustaining innovation rather than disruptive innovation and a new entrant may not be able to follow the disruptive trajectory as traced out by Christensen.

Organisational structure

In the Innovator's' dilemma (1997), Christensen stated that an established business can still fail even if management was doing everything it thought to be right by focussing on the customers' needs. Christensen further highlighted that the organisational structure of an established business does not allow the incumbent to respond effectively to the threat of disruption. At the outset, it should be mentioned that the research data does not show that the established insurance businesses in Mauritius have any difficulties to respond to a threat of disruptive innovation as suggested by Christensen. This can be explained by three things.

Firstly, the ability of an incumbent to respond to a threat depends on the knowledge of the threat. Secondly, the effectiveness of the incumbent's response depends on both the timing of the knowledge and response. Thirdly, in the Mauritian context, the damaging effect of disruptive innovation is more dependent upon the consumers' reaction to the new potentially disruptive product than the existing structure of the incumbent company.

During the course of the interview, the interviewees pointed out the small scale of the market and how relatively easy it can be to know what the competitor is doing and respond accordingly. According to Quantum Insurance, the response from the competitors came within six to eight months. Moreover, given the specificity of the market, the competition is mostly price driven and there is a strong brand loyalty to the incumbent insurance business. Those facts explain largely why the new entrant may not successfully move from the low end of the market to the mainstream market without being noticed by the other competitors and without a response from the latter companies.

What was clear from research data is that the traditional style of management and the traditional decision-making process can be very counterproductive in establishing a disruptive model. Also, the shareholders do also have an influence on the decision-making process either because the insurance company, which is part of a conglomerate, follows the overall strategy of the conglomerate or else the managers are not ready to confront the shareholders about adopting a disruptive strategy.

What stood out from the interview is that a disruptive innovation from a new entrant is not necessarily perceived as a threat in the Mauritian context because the market share of the incumbent is left unaffected. The organisational structure of an established firm clearly limits the ability of a firm to pursue disruptive innovation but does not appear to have a severe damaging effect when the incumbent faces the threat of disruption.

Cultural factors

Persistence of consumer behaviour in the face of new technologies

The findings support the view that there is a strong brand loyalty among Mauritian customers and that kind of loyalty benefits the incumbents. Mr Aliphon and Mr Siew were also sceptical about the eventual success of the Quantum Insurance's business model mainly because the Mauritian customers still prefer the face-to-face interaction to online purchase and because Quantum Insurance will not be able to sustain the large losses when face with a large number of claims. In the preceding paragraphs, there has been an attempt to explain why there is such a consumer behaviour which has not changed or is reinforced by certain underlying conditions.

It would be however be interesting to find out in a separate study -

1. whether customers in small markets or some limited geographical regions tend to give more weight to personal interactions and relationships in their purchasing decisions; and
2. whether the persistence or reinforcement of certain consumer behaviours could also be the result of a lack of production innovation and the fact the consumers are not accustomed to trying new things.

Management style

The age group and mindset of senior managers are considered as reasons for the traditional thinking and the reluctance or inability of companies to embark upon the disruptive strategies. It has also been suggested that -

1. the senior managers are themselves rarely adopters of new technologies;
2. there is resistance to change from senior management;
3. the top down management approach is a barrier to disruptive innovation; and
4. there is doubt about whether managers are willing to confront shareholders about taking risks with a disruptive model.

According to one interviewee, a disruptive model cannot co-exist with the legacy model of an established firm. Either the firm has to grow inorganically by acquiring another start-up company with a disruptive model or else revisit the whole structure. Most interviewees seem to suggest that the solution would be to have a younger and dynamic workforce. A younger workforce does not necessarily imply a greater aptitude and knowledge of technology. It is noted that none of the interviewees discussed the effectiveness of training for senior managers.

If the management style does in fact negatively impact on the process of disruptive innovation, the recruitment of younger staff may be the effective remedy. Businesses in pursuit of a disruptive strategy should be run separately from the established businesses, if that helps with younger staff well versed in technology.

Costs

Another factor which discourages disruptive innovation is the complexity of the insurance business and the associated costs. Mr Biltoo gave an example of the difficulties to hire skilled IT developers while Mr Devalet highlighted the fact that the local companies have to resort to expertise from South Africa to vet new products. Mr Siew, on the other hand, gave examples of training abroad.

If the core part of the disruptive model involves IT, the company needs substantial investment to meet those costs. A new entrant on the market would face a financial burden if there is no clear strategy about the cost of customer acquisition and development of its IT infrastructure. Both are equally important in moving up the market.

Infrastructure and connectivity

Out of the four interviewees, only one made mention of connectivity as an important factor that can impact upon the disruptive innovation. The latter did not explicitly state whether the current connectivity was so bad that it affects disruption, but he merely stated that the authorities should consider opening up the bandwidth to bring a higher internet speed because this would change the online user experience. There is no data, as part of this study, to suggest that the connectivity issues are presently a major factor in preventing disruptive innovation but it serves to highlight the importance of basic infrastructure to achieve successful disruptive innovation.

5.2 Conclusions

5.2.1 The theoretical framework

This study has provided valuable pieces of information which has furthered our understanding of the process of disruptive innovation in the insurance industry in Mauritius. There have been several findings from the interviews, but what really stood out was the interaction between the company, the consumer and the competition in the early stages of disruptive innovation.

The charts usually used to explain the process of disruptive innovation portrays mainly two kind of markets - low-end/new and high-end markets. One tends to think that those are two static markets and the company paved its way on a disruptive path from one market to another.

This study, however, shows the complexity of the insurance market in Mauritius, which may not be easily relatable to in other regions or developed economies. The theoretical framework does not in any way provide a road map for successful disruption but it provides a picture of the various barriers that both the company and the consumers have to meet and overcome for disruption to eventually take place. Those barriers are numbered in the theoretical framework in Figure 5.1.

For instance, the first step of a new entrant in the insurance market is to secure capital, overcome the challenges related to infrastructure and regulations. If a company fails at step one, it cannot succeed in the remaining stages 2-4 up to the marketplace. Equally, on the consumer side, price sensitivity is a critical factor in the insurance industry in Mauritius. In general, the typical Mauritian customer can switch to a different company because of the price. Once the price hindrance is overcome, the customer moves to the next stage.

The overall view is the movement of the company and pool of consumers as they each overcome a barrier and are influenced by a particular factor to move in a particular direction until they meet in the marketplace. When a critical mass of consumers joins a particular company to the exclusion of another, disruption happens.

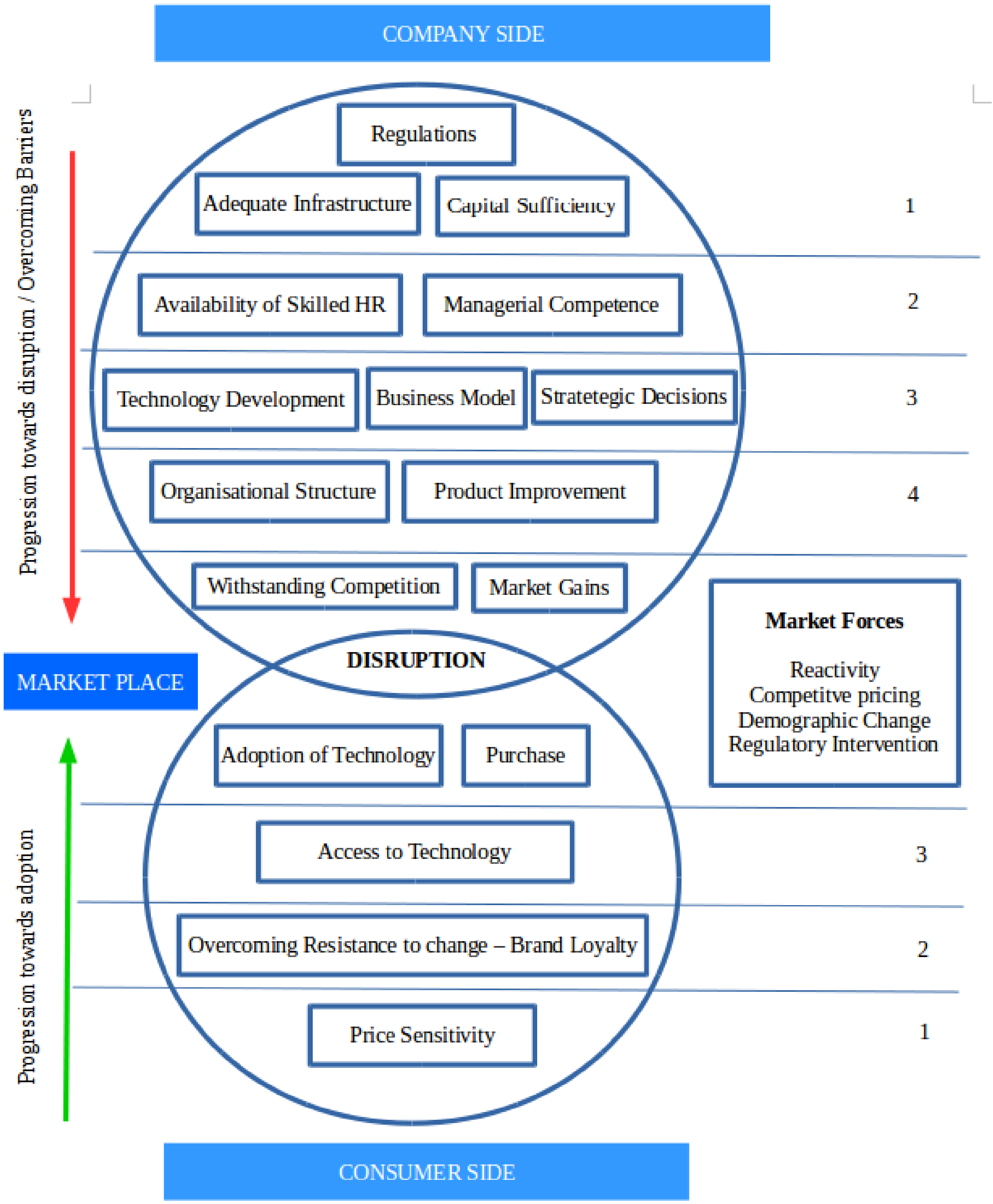

Figure 5.1Theoretical framework

5.3 Managerial implications

The findings in the previous chapter gave some insights about how the process of disruptive innovation is tied to the management structure, aptitude of senior managers and the decision-making process.

When the managers were initially asked to define disruptive innovation, there were different answers based on different understandings and varying interpretations. It is recommended that managers should be given opportunities to update their knowledge on new management concepts. These opportunities may come in the form of specific workshop training, continuous professional development courses or access to conferences. A sound understanding of the theory of disruption is key for proper resource allocation and identification of disruptive opportunities and threats, especially in specific parts of the value chain.

It is also recommended that the insurers should invest in ongoing training for the senior managers so that the latter could be more exposed to new technologies in the insurance industry. Senior managers with updated knowledge and skills can have significant contributions towards driving the innovation process within an organisation.

The findings also revealed that the managers ranked technology as a key factor in disruptive innovation and yet most of the companies have focussed on technology as a cost cutting and internal efficiency tool rather than as a way to transform the user experience and service to the customers. The constant focus on price and product features inhibits the companies' ability to use technology in other impactful areas. It is therefore recommended that the managers should familiarise themselves with ways technology can transform user experience and customer service. As part of their recruitment process, insurers should also hire competent candidates with a good understanding of technology.

As pointed out in the findings, there is a hierarchical or top down decision-making process within some insurance companies. In cases where insurance companies are part of conglomerates, it is recommended that there should be substantial autonomy and enlarged participation in the decision-making process within the subsidiary insurance company. Currently, the strategic decisions are taken by senior managers and the subordinate staffs are left to implement those decisions. Non-senior managers ought to be able to participate in the decision-making since certain key decisions like digitalisation and restructuring can cause resentment, frustration and resistance to change which would in turn jeopardising the implementation of disruptive innovation or response to impending threats.

Christensen has suggested that established business should set up different and separate units to respond to threats of disruption. It was found that when a conglomerate establishes a new business in Mauritius, that conglomerate still has a lot of influence on the strategic directions of that business unit. It is therefore recommended that the established insurance companies should focus on what they are really good at. The research indicates that two of the incumbents had a healthy and profitable business by the end of 2017. Instead of setting up ‘separate business units’ which would end up replicating the model of a parent company and ruining their existing structures, it is advisable for incumbents to invest in new start-ups. This would be a better way to foster innovation and the reap the benefits of disruptive change while breaking that cycle of poor local skills, poor innovation and persistent consumer behaviour. This also carries the additional benefit that the insurance company does not have to review the existing organisational structure which could lead to frustration and friction within the company.

5.4 Limitations

Whilst this research has provided unique insights of the disruptive innovation within the insurance industry in Mauritius, the study is limited to a specific industry in a specific geographical location. The findings cannot be generalised to the extent that they would be applicable to other industries within or outside Mauritius.

One of the aims of the purposive sampling for this thesis was to get qualitative data that would represent the views from both the incumbents and new entrants. However, at the time of the interview, only one potential case of disruptive innovation has been identified by the various managers. This fact has shaped the findings in one way. Another study with more cases of disruption could produce different results. In the present study, there are no comparisons between cases of disruption innovation that could provide a better assessment of factors affecting disruptive innovation within the insurance industry in Mauritius.

Another limitation here is that the process of disruptive innovation brought about by Quantum Insurance has not matured yet. How this process will end up is uncertain for now. The findings and conclusions of this study would surely need to be revisited at the end of the disruptive process, if any.

5.5 Recommendations for future research

The present study was carried out with a small sample which included only one example of disruptive innovation – a disruption process which is still ongoing at the time of writing. In the future, it would, however, be interesting to compare different cases of disruptive innovation, notably cases of actual disruptions, to further reliability and validity as well as identifying the common factors that enable disruption in the insurance industry in Mauritius. Therefore, another study needs to be carried out with a larger sample to allow such comparisons.

Also, many studies, including the present one, have focussed on factors impacting disruptive innovation rather than identifying the necessary conditions for disruptive innovation. The data gathered, as part of this study, did not make it possible to set a distinction between conditions and factors. Future studies however could pursue this line of enquiry to establish what are the necessary conditions for disruptive innovation in Mauritius.

It appears that the presence of conglomerates in a small market like Mauritius tend to shape the management culture and strategic decisions within the subsidiary companies. Further research would be needed to investigate the role of conglomerates in shaping in innovation in small oligopolistic markets.

The data from the interviews also indicated that the Mauritian customers would still prefer to have a personal interaction with an agent or intermediary before making their purchasing decisions. There was no quantitative data in the present study to analyse the consumer behaviour and the causal relationship with innovation or lack of innovation. The last suggestion for further research would therefore be an examination of the persistence of consumer behaviour in the process of disruptive innovation and the impact on the process of innovation.

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APPENDIX I - INTERVIEW QUESTIONS

All of the questions were sent to interviewees by email before the face-to-face interview.

Background information

1. Can you tell me more about your business background and your previous work experience (if any)?
2. Can you give me some background information about your company? (History, main activities and market, number of staffs, etc.)

The industry

3. What is your assessment of the insurance market in Mauritius today?

4. How do you define the term "disruptive innovation"?

5. Has there been any instance of disruptive innovation within the Insurance Industry in Mauritius in the last 20 years? If yes, please elaborate?

6. What do you think made that kind of innovation possible? Alternatively, why, according to you, has there been no instance of disruptive innovation in the insurance industry in Mauritius ?

7. Is there room for further disruptive innovation in the insurance industry? Please explain why.

8. What are, if any, the current barriers/challenges to disruptive innovation in the insurance industry in Mauritius?

Your company and disruptive innovation

9. What are the key factors that influence/determine the insurance business model?

10. Is it more internal (perception of a manager, existing structures, processes, resources - brand, key competences that you have), or external (such as the key technology trends, economic conditions (purchasing power of the customers), lifestyle changes, etc.)?

11. Does your company have a business model or strategy to bring disruptive innovation in the market?

12. Are there enough resources allocated to allow the company to bring that kind of innovation?
    1. What are those resources?
    2. What other resources would be needed?

3. How crucial are these resources to the process of disruptive innovation?

13. What is the decision-making process like within your company in respect of business strategy and resource allocation?

14. Does the current structure and decision-making process have an impact on the process of disruptive innovation?

15. How is that process managed?

Structure, size and level of competition

16. Are the organisational structure and size of your company an advantage or disadvantage
    1. to bring disruptive innovation or
    2. to respond to a threat of disruption?

17. Please elaborate on the above

18. What are the barriers to entry in the insurance industry?

19. Is competition aggressive in the insurance industry? Does that explain the prevalence or lack of disruptive innovation?

Technology

20. Are insurance companies in Mauritius adopting new technologies to deliver their products /services?

21. Do companies value technology as part of their business strategy?

22. Is the adoption of technology in the insurance industry driving disruptive innovation? How? Why?

Competence/ ability/ knowledge

23. How well do you think managers or insurance companies in Mauritius understand the concept of disruptive innovation?

24. How well do you think managers/companies are able to recognise patterns /signs of disruptive innovation happening in the industry?

25. Is there sufficient competence (managerial, technical or legal) to bring disruptive innovation in the current market or to understand/respond to threats of disruption? How do you explain that situation?

Culture

26. Is there an innovation culture within the insurance industry?

27. What kind of innovation do insurance companies in Mauritius tend to value?

28. Does the management culture in Mauritius enable disruptive innovation or is it a barrier to disruptive innovation? How so?

Motivation

29. How motivated are companies/managers to pursue strategies for disruptive innovation in the insurance market in Mauritius? Why?

30. Is disruptive innovation perceived as a threat by large established companies? If no, why?

31. Do companies/managers implement strategies to counteract threats of being disrupted? If, yes can you please provide some example?

Access to capital

32. How easy or difficult is it for a new company to raise money from venture capital in Mauritius?

33. Does the ability of a company to raise capital impact on disruptive innovation or the response to an impeding disruption?

Policy decisions and regulations

34. Are there any policy/fiscal decisions which are encouraging disruptive innovation in the insurance industry? Please give examples.

35. Are there any policy/fiscal decisions which are discouraging or preventing disruptive innovation in the insurance industry? Please give examples.

36. Since the insurance industry is heavily regulated in Mauritius, how are those regulations impacting or likely to impact upon disruptive innovation?

Final question

How would you rank the factors impacting disruptive innovation in the insurance industry in Mauritius?

APPENDIX II - TRANSCRIPTS OF FOUR INTERVIEWS

1. Interview of Mr. Guyto Devalet, Operations and Technical Manager at Metropolitan Life (Mauritius) Ltd

So, the topic for the thesis I have been written on is "what are the factors that encourage/discourage the disruptive innovation to happen in Mauritius especially within insurance industry?"

Q: Please tell me more about your background, your experience and how long have you been working for the company?

GD: My name is Guyto Devalet. I have been working as an insurer for the last 30 years. I am an Associate of the Chartered Insurance Institute for 20 years. I have been a manager for different functions since 1998.

Q: Can you please tell me more specifically in what position you were working as the manager in the last 20 years? (2.00s)

GD: The first manager position I was the Branch Manager, leading a sales team in Flacq - in the east of Mauritius. I have been there for 5 years from 1998 to 2004. Then I came back to the Head office of my previous employer to be the Operations and Technical Manager. So I was in charge of all operations and technical aspects of the Life department of La Prudence insurance company from 2004 to 2006. Then I moved to Mauritian Eagle Insurance as the Life Technical Manager since 2006. And this company has been rebranded and acquired by a South African company, MMI Holdings. Mauritian Life became Metropolitan in 2013.

Q: and was it acquired by whom?

GD: MMI Holdings of South Africa. And the company was rebranded into Metropolitan life.

Q: Can you please tell me that you were the Branch Manager in Flag for 5 years, may I know which company was it? (4.00s)

GD: La Prudence. For the current position, I was moved from Technical Manager to Business Development Manager in 2016.

Q: Please tell me the size and the main market of the current company that you are currently working on now in Metropolitan?

GD: In fact, our company works in Life and Pension. Currently insurance company can either work on Life and Pension or General insurance. Previously, the insurance company could do both, but the law since 2011 has made that they should do business under separate entities. So Metropolitan Life is only doing Life and Pension business.

Q: So, since 2011, the law has said that the insurance company can do only Life and Pension or General insurance (5.00s)

GD: So, either long-term insurance. In fact, Life and Pension is categorised as a long-term business. General insurance is categorised as a short-term business.

Q: Please tell me what is the size of Metropolitan compared to the overall insurance market?

GD: Our turnover is around 200M annually and it grows every year.

Q: So now we are moving to the industry part of the insurance. The first question is "What is your assessment of the insurance market in Mauritius today?" (6.30s)

GD: Let's say the insurance market in Mauritius is a force into the financial services industry. And this is a sector which always does well in the economy of Mauritius. As all of financial sector, we have bank, offshore and insurance. Every year the business grows and it brings value to GDP of the country. In fact, there is always an organic growth, the figures automatically increase. Let's say for a short-term insurance, every year, you have new cars being sold. All the new cars add to those already existing, then there is a need for the insurance. We have new people taking loans from the bank, billions of the loans are being released every year. It means there is a demand for life insurance cover. There are people who have an increase in salary or those who are students who come on the employment market, then they subscribe to life insurance or pensions. So, it is always a dynamic industry, it is not an industry which is falling and it an industry which always grow year on year. This is one part, the second part is that the insurance market does good as regards saving. Because when we speak about long-term insurance, this is mainly about saving. Long-term insurance products serve to help people to save on a monthly basis for future needs and financial needs. On the other part for short-term insurance, we cannot imagine how it would have been if we did not have insurance. Let's say, last time we had Shoprite supermarket caught fire. Thanks to the insurance, despite the fact that Shoprite has not reopened yet, all the damaging effects have been served because insurance money has been paid. For any small insurance, let's say accident, health insurance, how many people who thanks to having a health insurance cover have money to pay for their in-patient treatments and out-patient treatments. So, the insurance industry serves the good running of the country. We need insurance; we need a lot of insurance. That is a good thing for Mauritius and for the industry in general.

Q: Have you ever heard of the term "Disruptive Innovation"? (10.40s)

GD: Disruptive Innovation. Yes, I have heard about innovation as much, but disruptive, not much.

Q: What would you understand at first when hearing the phrase "Disruptive Innovation"? (11.00s)

GD: I would say that disruptive innovation…correct me if I'm wrong. It's about the new challenges which apply to the innovation sector when it relates to how we would do business in the insurance industry. Today we are in the digital world, everything is digital; this is one aspect which will have a key impact on the way we do business.

Q: Has there been any instance of disruptive innovation within the Insurance Industry in Mauritius in the last 20 years that you are aware of? (12.20s)

GD: I can say that the insurance industry is a bit traditional in Mauritius. The environment is changing, we are bound to change. The biggest companies who could bring innovation but because they have a good share of a market and they are well installed, they do not see the need to do much more because they are already controlling the business, the market. This is one thing but yet because everything is changing, digital has come our way, we can't imagine doing business while ignoring the impact of digital on our operations. Let's say innovation has been visible mainly the way the marketing of insurance products has been done.

Q: So do you mean that the innovation has only been visible in the marketing department and where most of the innovation has happened? (14.30s)

GD: Yes. In the strategy to bring business, we could have innovation in the products. There has not been a lot of change in the products, the market has not innovated as regarding the products. The processes have not much changed in the last 15 to 20 years. But what has changed is the interaction with the customer. Let's say Metropolitan as one of the examples, we have a digital strategy. It means that we have a Facebook page; we have the agreement with the provider to make regular posts on our activities, events, products, services regularly. Thanks to this method, we have a big reach of the customers or even non-customers and through this channel we were able to generate leads [..] This is one way where innovation has been seen. Previously, we did not even have Facebook or we did not have digital marketing and so on. Today we have it and it brings us closer to the potential customer, which we could not do previously. This is one aspect of the innovation that we have seen is the interaction with the end customer.

Q: Firstly, I'll just briefly explain the term of disruptive innovation. The father of disruptive innovation theory was Christensen. Let's say that there is an established company in a market that focuses on targeting their products/services to the profitable customer segment and ignores the less profitable segment. Then there is a small company with less resource and they have an innovative product or services and they try to reach the customers in the unprofitable market that the existing established companies ignored. Gradually, that small company with the innovative product starts taking over the market of the existing established company. And that is when and how disruption happens.

Have you heard of any similar situation like this happened in Mauritius?
GD: As I have told you, Mauritius market is a very traditional market. The insurance industry is highly regulated. Secondly, if you want to enter the market, you firstly will need the capital. That's why we do not have people applying for a license every year. The processes and the expectations of the regulator regarding to the operations, we need to have a Board of directors; we need to have anti money laundering officer, compliance officers. So, it is not easy for a small company to enter the market.

The law changed. As from 3 January 2011, all composite insurance companies, that is companies which could do long-term and short-term insurance, should split. What happened is that where one company had to have a deposit of 25 Million rupees to have the license, they now had to have two deposits - 25 Million rupees for long-term insurance and 25 Million rupees for short-term. So what happened, is that there have been mergers of insurance companies. Instead of having small insurance companies competing, in fact we had the reverse. For instance, La Prudence and Mauritius Union merged. It means that La Prudence took the long-term insurance business of Mauritius Union, Mauritius Union took the short business of La Prudence and all of them work under a single roof. For our small industry, the coming of a new player is very difficult. I don't say it is impossible but it is very difficult.

For the question you asked me, I can confirm that there have been no new players in the past 10 years. But it can happen tomorrow that there is new player. There are two ways for a new player to enter the market; it can be either start from a scratch or acquiring the existing one. Let's take the example of Metropolitan where I am currently working, in fact, it is a South African brand. They wanted to do business in Mauritius, but they didn't want to start at level zero. So, they looked around the market, then consulted, had negotiations, finally they agreed to purchase the life insurance business of Mauritian Eagle.

At Metropolitan, there is a strategy is called "Roadshow" where we have a small stand in crowded places like Bagatelle, Jumbo Riche Terre, Jumbo Phoenix to reach to more customers, it starts at 9am and finishes at 9pm from Friday to Sunday. The strategy happens every quarter especially the end of the month when customer just got the salary and can afford more. This strategy didn't exist before, this was something new. Some competitors saw this method working; they tried to copy it even though the copy isn't as good as the original one.

Q: What do you think made that kind of innovation possible? Alternatively, why, according to you, has there been no instance of disruptive innovation in the insurance industry in Mauritius? Since this question has already been answered so I move to the next one.
Is there room for further disruptive innovation in the insurance industry? Please explain why. (28.00s)

GD: There are two things, the innovation aspect and the disruptive innovation which I understand are different things. Let's say for disruptive innovation, the main problem that we have is that it will depend on whether the company is sufficiently bold to say I start .... You know that the problem we have in Mauritius at first is that we are a small country with 1.2 million inhabitants and the working population is 400 000, it is not a lot.

Secondly, we already have so many companies in place. We have around 30 companies both long-term and short-term companies. So, it means that most of investors are already shareholders in the existing companies. For a new player to come in, it will be difficult.

But from the perspective of innovation purely, i can expect that will be ongoing. If we want to progress, we also need to follow the trend of innovation or trend of the way business is being done. For example, something which has been done by some company is online access to the insurance account. This has been done by one company, Swan Life. if you subscribe online, you can have access online, you get a login, you get a password just like internet banking but you can make any movement of funds you can only view your account. But even websites, it is considered as common today but 15 years, 20 years back, there were no websites. But today the website is considered as a normal to have for a business. Websites is something that has changed the way the potential customer interacts with the company after office hours.

Q: What are, if any, the current barriers/challenges to disruptive innovation in the insurance industry in Mauritius? (32.00s)

GD: Firstly, insurance is a highly regulated market in Mauritius and so entry is difficult for any new starting company. It is technical, so you will need to have the right persons to take the different responsibilities in an insurance company. This is why what we have seen recently, most of the time they acquire an existing company. Let's say Insurance accounting is technical, you need qualified accountant but he needs exposure to the insurance business to be able to be a good Chief financial officer. Or we also have the actuary who designs the product before it being sold. In Mauritius, if you want to sell a product, you need to have a vetting from actuary, and most of the time the actuaries are foreigners, from South Africa. So, it is costly, time consuming, it is highly regulated.

The second thing that I have mentioned, the capital required is a high amount, so people need to have a sufficient amount of money to expose to start a new company. The third thing, as I mentioned as well, the private sector, they are already shareholders of existing companies because insurance is an important aspect in their business. The big conglomerates already have a subsidiary which is doing insurance business, so they will not invest in a starting insurance company when they are already a shareholder in another business. For those insurance companies who are not yet in conglomerate, they don't feel the need to invest because it is very technical.

Q: I hope the time is good for you. Since the time is constrained, we will need to be a bit quicker. So, we are now moving to part of your company and disruptive innovation. **What are the key factors that influence/determine your company's business model? Is it more internal (perception of a manager, existing structures, processes, resources - brand, key competences that you have), or external (such as the key technology trends, economic conditions (purchasing power of the customers), lifestyle changes, etc.)? (38.35s)**

GD: For an insurer, the strategy should be external. By definition, we deal with customers it is the customers that make the company exist. So, we rely lots on the customer to do the business.

Q: So, do you think that insurance company is just about the external?
GD: let's say the internal part is about the organisation, the structure doesn't make the business, and it is the interaction with the customer which makes the business.

Q: Does your company have a business model or strategy to bring disruptive innovation in the market?
GD: As a company, the issue is how to innovate, how to keep trend with the market, the customers. Whether it is disruptive or not, this is another issue. ...

Q: Do we have any specific apartment to look for new ideas, start-up to invest?
GD: As far as I know, there is no company has an innovation department in Mauritius. We have sales and marketing departments. There is another thinking that the issue of marketing and Innovation should not be vested to a single department, it is the affair of everybody. The process in most companies is management's decisions; they will consider what the best thing to do. As for the insurance company, we are selling a financial product, a technical product. That's why the decision cannot be taken separately by one department. The product has to be designed, to be valued, to be assessed. We have marketing department, sale department but for an innovation department as such, we don't have. The innovation may not happen in marketing department, but maybe it may take place in technical department.

Q: Are there enough resources allocated to allow the company to bring that kind of innovation? (2nd record-2.51s)
GD: As I mentioned, Mauritius is a small market and innovations are not that that big. Let's say we have to launch a new product that it costs around 500.000 Mauritian Rupees, you need to ensure that you can at least break even. There is innovation but I don't expect to have big changes going

forward because of the small market, because of the technicality of the product and we have very few insurance product which are compulsory and in the design there is nothing much to do.

In Mauritius, there are compulsory insurance which are motor insurance or when taking a loan from the bank, we will need a life insurance or travel insurance. It is a standardised format and there is not much thing to innovate and it stayed the same for so many years. The rest of non-compulsory insurances depends on the will of the clients, so insurers have to fight to make business but of course they need to be quite attractive in the process to be able to reach the market.

Q: Are the organisational structure and size of your company an advantage or disadvantage to bring disruptive innovation?

GD: The size is an advantage. Because the innovation is linked to resources and costs. The bigger company, the more it has the resources in terms of human capital, structure, systems, in terms of money available. Definitely, if you have a bigger company, you have better chances to bring the innovation, disruptive innovation.

M: Do you also agree with the bigger the company is, they are also easier to respond the threat of the disruptive innovation?

GD: Yes

Q: Is competition aggressive in the insurance industry? (6.35s)

GD: No. There is competition in the market. There is a price war mostly for compulsory insurances. The customers are price sensitive.

Q: Do you mean that the customers in Mauritius are very price sensitive?

GD: Yes, they are. There is price war, mostly for compulsory insurance which are life insurance and motor insurance.

Q: Are insurance companies in Mauritius adopting new technologies to deliver their products /services?
GD: Technology is a must

Q: Can you please explain more in details which technology? (8.10s)
GD: Firstly, the the technology is for internal processes. So let's say we have a client, we need to register in the system to issue the policy, to generate the payment and so on. Secondly, it is about the marketing aspect (Facebook aspect) for social media.

Q: So how well do you think managers or insurance companies in Mauritius understand the concept of disruptive innovation?
GD: The knowledge is quite low regarding this aspect. All managers are aware that they need to do thing differently. But I am not sure whether the concept of disruptive innovation is in the minds of these people. We may have read the theory but to apply it in reality, I am not sure.

Q: How well do you think managers/companies are able to recognise patterns /signs of disruptive innovation happening in the industry?
GD: Please explain more in detail of your question.

Q: How well do you think that managers are able to see any threat of smaller company coming? (2nd rec – 10:52)
GD: Mauritius being a small country, everything happening is known quite rapidly. While saying this, I just recall that there is an insurance company called Quantum. They could be an example of what you say as a disruptive innovation. They are the latest company that started from scratch. What they are doing it differently that they do everything online and they don't have intermediaries, so their costs are offered lower than most of the traditional insurance. Everything is done by online, direct channel to customer. But unfortunately, they didn't work out quite well. Their profit for the

first year was quite low. And I understand why it was like this. Mauritian market is not ready for it, the customer doesn’t trust just to purchase it online. But we can’t really say that they are disruptive the established one. The established one may lose 1% or 2% of the profit toward to them, but they are still a small figure.

Q: Is there any conferences in Mauritius for venture capitalist to come and look for innovative ideas to invest?

GD: No there is not yet for insurance.

Q: Not necessarily for insurance.

GD: No that I am aware of.

Q: Is there sufficient competence (managerial, technical or legal) to bring disruptive innovation in the current market or to understand/respond to threats of disruption ? How do you explain that situation?

GD: Yes there is competence for innovation. The company are already satisfied with what they have so they do not see the point of investing heavily into innovation.

Since the time ran out, the rest of the interview was done by email.

CULTURE

1. **Is there an innovation culture within the insurance industry?**

There is a moderate innovation culture within the local insurance industry.

2. What kind of innovation do insurance companies in Mauritius tend to value?

Insurance companies tend to value innovation which has a direct impact on

Sales and/or the brand image of the Company.

3. Does the management culture in Mauritius enable disruptive innovation or is it a barrier to disruptive innovation? How so?

Basically, disruptive innovation will come from outside, that is from a new entrant to the Company. Existing companies will tend to react to any innovation that is having a disruptive impact on the market. The management culture in Mauritius will be more of an enable mode than be a barrier to that.

MOTIVATION

4. How motivated are companies/managers to pursue strategies for disruptive innovation in the insurance market in Mauritius? Why?

The respective motivation of various companies will depend on their size and their market share.

Bigger a Company, less will be their motivation to innovate.

5. Is disruptive innovation perceived as a threat by large established companies? If no, why?

Yes disruptive innovation will always be perceived as a threat.

6. Do companies/managers implement strategies to counteract threats of being disrupted? If, yes can you please provide some example?

We have not yet been subject to disruptive innovation and so we cannot provide examples.

However, the practice is to assess the innovation that is being brought by a competitor and try to improve on the offer being made available to the market.

ACCESS TO CAPITAL

7. How easy or difficult is it for a new company to raise money from venture capital in Mauritius?

It is not easy for a new Company to start insurance business in Mauritius.

8. Does the ability of a company to raise capital impact on disruptive innovation or the response to an impeding disruption?

Yes, the ability to raise capital impact on disruptive innovation.

POLICY DECISIONS AND REGULATIONS

9. Are there any policy/fiscal decisions which are encouraging disruptive innovation in the insurance industry? Please give examples.

No.

10. Are there any policy/fiscal decisions which are discouraging or preventing disruptive innovation in the insurance industry? Please give examples.

No.

11. Since the insurance industry is heavily regulated in Mauritius, how are those regulations impacting or likely to impact upon disruptive innovation?

Due to heavy regulations, entry to the insurance market will be limited. This is impacting directly on disruptive innovation.

FINAL QUESTION

How would you rank the factors impacting disruptive innovation in the insurance industry in Mauritius?

1. Technology
2. Consumer understanding of insurance matters
3. Uncertainties and acts of God which create potential threats and demand for insurance coverage.

2. Interview of Mr. Gaël Aliphon, Manager (Sales and Development) - High performance coach at Swan Life Ltd & Swan General Ltd

Q: Firstly, we will start with the background information. So can you please tell me more about your business background and the previous experience?

GA: Well, I have been working in the insurance field for about 20 years. My background is more on the life insurance side to start with. I studied for Chartered Insurance Institute Associateship and then I specialised myself into the marketing and sale side of life insurance. But before that, I covered all product developments and technical aspects of life insurance, being endowment or conventional plan. Then I moved to different positions like commercial manager to technical manager to agency manager like leading different agency forces for different insurance companies. I also touched some pension aspects as well, corporate entrance aspects. Then I moved to Swan in 2010 to launch their individual business units as we call. The business individual units are more about retail side of insurance for Swan. This has included not only life insurance but also for general insurance for the last 8 years. I have been working towards setting up all distribution sale channels, product development and capability for Swan retail business.

Q: Thank you for much. Can you please tell me a little bit more about the background of company such as history, main activities and market? (3.20s)

GA: As far as I can tell you that Swan is a brand name to start with. Under Swan we have a Swan life insurance and Swan general insurance. But Swan also got the Swan Wealth Managers, and Swan starts to work on Swan Stockbrokers. We got Swan Pension. But the two main holdings that are long-term and short-term (life and general) insurances. But we want to be known a Swan. This is how it is working. Swan General has been here for 160 years. Swan Life has been in existence for the past 65 or 70 years I think. It is two completely different business. Swan General is a huge player in Mauritius for general insurance side. We got quite huge amount of portfolios with corporate clients. Since the last 8 years, not diversify, but we have also focused on the retail side. We also want to play our cards on retail side as well, not just only for corporate clients for Swan General.

As far as the Life insurance is concerned, it is quite a different structure. Setting aside what we call a group pension side of life business, which is companies taking group pension for employees, most of the business of the life side is retail business, it is a long-term plan sold to individuals. So it is two companies which completely two different business models, trading under one brand name of Swan.

Q: So, the general is more on corporate clients and the life insurance is more on retail clients.

GA: Historically, it has been like that for years, and we are changing our approach for general side for the past 10 years. We are not just focus on corporate clients, but we also want to tap into retail business as well.

Q: Thank you so much. Now we are moving to insurance industry part. So, what is your assessment of the insurance market in Mauritius today? (6.40s)

GA: In term of what? You meant sales, potential, market or product development?

Q: Please tell me more in terms of sales and product developments.

GA: Both life and general?

Q: Yes please.

GA: I must say that the insurance market in Mauritius is not yet that developed in terms of products or capabilities. But this is changing; insurers are still heavily traditional in terms of their approach. The market unfortunately for general insurance, is still price driven. Let's say for car insurance, most clients are still very touchy and very price sensitive. They will look first and foremost at price, but it has changed. They are not just only looking at the price, but the brand name itself. In Mauritius, we have four big companies with brand name and reputation. Four companies which, brand wise, are perceived as the same as financially solid and stable. When we had a market study where we realised that the first thing clients would look at it is a brand, the financial stability. It depends on which types of clients, but the market we are looking at, they look at the brand. When looking at the brand, they rate three or four companies as equivalent in terms of brand name. And the next decision-making factor is the price. They are not very interested in product features or how different it is. For them, car insurance is a commodity and everything else is just the same. Unfortunately, most of clients look at price and that is what we are fighting against. The competition is very price driven of car insurance market.

What has changed as well is the demand for health insurance. Nowadays, most of clients are conscious about being well insured in terms of health. They want and they ask for a proper health cover. But yet the thing is that the knowledge and level of understanding of health insurance in Mauritius is quite low. Most clients when talk about health insurance, the thing they would look at is to cover the dentist costs, flu or optician. For them, those are the first thing they would look at it for health insurance. For us, as an insurance company, health insurance is not just merely a question of getting cover for dental, flu or optical cases. Health insurance is getting covered in case of catastrophe. For us this is what is important. So, there is a need to educate the Mauritian market, we need to get insured in case of accidents, ill, hospitalised, need to be in clinic for three to four days. Many clients don't want to rely on the public hospital since they don't trust the service. So things are changing in the market in Mauritius. Let's say travel insurance is a new trend and it is picking it up. Most travelers are aware that they need to be insured when travelling. The travel agencies do sell the travel insurance for us. Sometimes it is compulsory. That is quite straightforward. As far as home insurance is concerned, it is still very low in terms of picking it up. In Mauritius, when you traditionally build your house, you need to get fire and allied cover for the bank purposes for the bank to agree to lend you a loan, in case the house is burnt down and they lose their assets. But there are so much more than just fire and allied cover. But this is still yet to get into the mindset and habits of Mauritian to get the house insured. For them, having a fire in a house is so remote or just like having a flood cover for your car. I don't know if you are aware of flooding which happened in Port Louis few years back then.

Q: Yes I do, it happened in Caudan Waterfront.

GA: Yes. Previously to that event, if you asked client to buy the car insured in case if flood, they would laugh at you; they would say why I need to get a flood cover for car, when will my car get flooded. Since then, flood was included into all car insurance policies. We noticed the same thing for the house insurance, it started this year. In the beginning of the year 2018, there were some severe floods and clients realised that they need to have a cover for their house. We have cyclone in Mauritius but not the severe ones in the last 10 years, they tend to forget about the need to get insured in case of cyclone. We are trying to educate client in terms of transferring that risk. For a small premium, you get a peace of mind that my house is insured in case of flood, theft and anything that could jeopardise my assets. It was one of a fight for sellers like us to change people's minds.

Q: Since I moved here, I realised that it is quite difficult to change the habits of Mauritian. **Have you ever heard of the term "disruptive innovation"? (16.00s)**

GA: Yes, like online, technology and things like that you meant?

Q: So yes, technology is a big part of it. So there is theory is called 'disruptive innovation', which said when there is a new player with less resource target into the segment where it is less profitable, often ignored by the incumbents, then gradually they come and take over the mainstream market with their innovative or affordable products or services. Let's take Airbnb as one of the example of disruptor in hotel industry.

So, for that definition, have you ever seen any instance of disruptive innovation within the insurance industry in Mauritius in the last 20 years?
GA: We had one insurance company recently; I am not sure whether if it is a disruptive innovation at such. But traditionally, all insurance companies distribute their products through intermediaries, via brokers, sale agents. Because traditionally, most long-established insurance company like Swan, they have access to clients through those intermediaries. There is one insurance company who came in and which said we will not transact through intermediaries but online directly with you.

Q: May I know if it is Quantum? (17.30s)
GA: Yes exactly. So that is the only disruptive innovation in terms of how to distribute their products to clients that I can think of in Mauritius. We didn't have any disruptive innovation in terms of new products features or new things that came into the market; it is more like how we are selling to the

clients. That is the only one I am thinking about. But in any case, Swan today also got the online distribution channel. As clients, you can purchase or transact online. But it is all a question of the strategy, or which strategy you want to adopt. Quantum for example has adopted low cost strategy; they want to be perceived as being the lowest car insurance provider. To be low cost, they need to reduce the fees with intermediaries. But at the same time, to remove intermediaries, you will need to invest heavily into technology, system to make sure that you can transact online. I am sure that one day it will pick up, but for the time being, Mauritians are convinced to transact 100% online. Quantum has realised that, they do not just transact online 100% but also via telephone. Most of their sales are done via phone rather than purely via online. You can of course get the quote online. That is it I saw as a disruptive innovation in Mauritius for the last 20 years.

Q: I have just realised that Mauritian still prefer to do thing traditionally.

GA: Yes. They are quite traditional. They would prefer to do thing tied to someone they know. Mauritians have not yet got the culture of self service, they like to be served. They like to have someone do things for them rather them doing things by themselves. This is a general statement. But I tend to think like that.

Q: So Mauritian people would prefer to be served face to face.

GA: Yes. But it also depends on the products. Like car insurance can be done online and I am sure that this is the way forward. But it will be more difficult to sell the investment plan, in terms of long-term insurance via online. Online sell is something is more straightforward, basic, easy thing that there is no value added of having someone talk to you. If you can have someone to talk to you online via live chat, it is just same as face to face. But what yet to happen, Mauritian is quite price sensitive, they still tend to think that online price is not the best price, they believe that if they know someone in the insurance company or if they have someone to talk with, they can negotiate the price.

Q: What are, if any, the current barriers/challenges to disruptive innovation in the insurance industry in Mauritius? (22.30s)

GA: I think regulations make it more difficult. We are selling financial services and we are quite heavily regulated. And sometimes we have to make sure that we are doing things within the legal framework. The only barrier I can think of is the legal aspect.

Q: What are the key factors that influence/determine the insurance business model? (23.35s)
GA: We have the management structure where we are asked to think outside the box, we are not asked to do things that already have done. We want to instil a new culture within Swan where each staff can bring new ideas if they want it to. One thing is for sure that we want to streamline and make sure all of our processes, if it has to outsourced, it is outsourced but if it has to be in-house, it will be optimised. We are insurance company, we are not here to administer, and we are here to sell, we are here to deal with clients. We want to make our company become more oriented in terms of development, sales, those aspects rather than managing or processing or administering things. There is a huge focus on optimisation of processes and resources to make sure we don't lose time.
We want to be agile and light. We don't want to be a company which is employee intensive so that we are heavy so that we need four persons to administer one policy.

We want to digitalise and make technology part of the game in terms of strategy. We also have international business partners. We don't sit and see how things are done in Mauritius. We try to bring in ideas from outside. We are encouraged to think. We have our strategic plan; we want to bring in our products. **(27:16 s)**

When we look at our new products, we won't just benchmark our products with what's done in Mauritius, we also benchmark our products with what is done in Europe, UK, and South Africa. We want to bring in the latest things even sometimes Mauritius market is not ready for it but we try to bring in those aspects. We are working on many new projects which haven't been launched yet in Mauritius but we are working on it, which can be very costly at times, but we are working on it.

We won’t be launching it today, we will be launching it in 2 or 3 years times but when the time comes we will be ready for it. Even if the market is not ready now, we want to work on it now and be ready in 3 years’ time and take some edge.

Q: Does your company have a business model or strategy to bring disruptive innovation in the market? (28.20s)

GA: Yes. We are getting into it. I take one example. We have purchased a start-up company, which is a software developer.

Q: Is the company in Mauritius?

GA: Yes, there are two Mauritian start-ups, a bit like Silicon Valley but in Mauritius. We identified them and bought 50% of the company. Their role is to develop and bring in their competence in terms of software development to look at the trend and see how they can help us.

Q: May I ask the name of the start-up company?

GA: I forgot what the name is.

Q: So, one the resource you mentioned is technology. Do you think any other resources to make this kind of innovation happened?

GA: Technology is a huge part of it. There is also culture of company and human resources. **(30:33s)**

Q: What is the decision-making process like within your company in respect of business strategy and resource allocation? (30.49s)

GA: Unfortunately, it is still much more top down driven. It is more about senior management decision and thinking; together with CEO they discuss and decide key strategies, key directions or key initiatives which are then cascaded down to lower levels and staffs levels for implementation. It is more top down. **(31:41s)**

Q: Does the current structure and decision-making process have an impact on the process of disruptive innovation?

GA: Yes of course it will.

Q: How is that process managed?

GA: Normally you have a centralised product management team here where anything that you would like to do.... In term of realisation of projects, we can't chase too many things. If you don't have some kinds of warden of project, implementation and time, you won't do anything. So that is why the process to always go through the product management team that help you and guild you to implement your products.

Q: Are the organisational structure and size of your company an advantage or disadvantage to bring or to respond the threat of disruption? (33.00s)

GA: For the time being, I don't think it is an advantage. We are still too conventional in terms of structure.

Q: What are the barriers to entry in the insurance industry? (33:45)

GA: I think it is quite capital intensive. To be able to create an insurance company, you need to bring in huge funds. That's the regulations; you need to be financially solid to be able to launch an insurance company. It is not that easy to launch an insurance company for new players. (34:11)

Q: Is competition aggressive in the insurance industry? (34:17)

GA: No. They are more aggressive in terms of price, not in terms of innovation. (34:26)

Q: Are insurance companies in Mauritius adopting new technologies to deliver their products or services? (34:45)

GA: Apart from the online capabilities. At Swan, for example, we looked at and we are working on CRM (Customer Relationship Management) system. We want to empower our salesforce and our team to look at the customer 360 degree. We want to be able to have a single view of the customers, the retail customers. Technology wise we've invested into a CRM system to work on it.

Q: Do companies value technology as part of their business strategy? (35:48)
GA: Yes.

Q: Is the adoption of technology in the insurance industry driving disruptive innovation? How? Why? (35:58)
GA: Not yet. Most of the companies are still lagging behind in terms of technology. They invested in many other things, other than technology and most are still lagging behind. (36:15)

Q: How well do you think managers or insurance companies in Mauritius understand the concept of disruptive innovation?
GA: This is a good question. Some exceptions put aside. Most managers or senior managers in insurance company are very old. There have not been any refreshing of generation in terms of.... The decision makers within insurance industry in Mauritius are very old. You got very few young CEOs and the only two young CEOs in insurance company in Mauritius. One is from Swan and one is from Mauritius Union. The others are from the older generation. Today that's the threat in Mauritius, we don't have many of young minds who have the international exposure or open-mindedness. They just want to do thing traditionally or else they don't know how to it differently so they do things as it has always been. **(37:46 s)**

Q: How well do you think managers/companies are able to recognise patterns /signs of disruptive innovation happening in the industry?

GA: I would be very happy to know more about disruptive innovation. If they don't know or haven't heard what the disruptive innovation is, they can't do anything about it. The first thing for them is to make sure that they know what it is all about. **(38:23)**

Q: Is there any conference for networking or for venture capital to look for new business ideas to invest? (39.20s)

GA: Yes we did have some young entrepreneurs competitions or things like that. That is how Swan knew about two Mauritian start-ups, but not specifically in insurance. Not yet in Mauritius.

Q: Are we running out of time?

GA: I have 5 more minutes.

Q: Even if we can't finish it today, can I send you the rest of interview questions to your email?

GA: Yes of course

Q: Is there sufficient competence (managerial, technical or legal) to bring disruptive innovation in the current market or to understand/respond to threats of disruption? (40.02s)

GA: Yes, I think so.

Q: Is there an innovation culture within the insurance industry? (41.17s)

GA: It is starting.

Q: What kind of innovation do insurance companies in Mauritius tend to value? (41.30s)

GA: They try to have some innovative product features, build in some loyalty, they try to differentiate themselves in terms of interacting with customers, and things like that.

Q: Does the management culture in Mauritius enable disruptive innovation or is it barrier to disruptive innovation? As you mentioned above, the senior manager generation in Mauritius is quite old.

GA: From my point of view, they are maybe barriers without knowing it. They will be tempted to think traditionally, that's my point of view. For the young minds, they need to fight. If you want to bring it in, you need to push through, go forward. If someone wants to bring in the disruptive innovation, he may have to do it by himself or try to find his own way. Because if they have to depend on the insurance company, it will take quite a long time because there are too many things involved today in the business world.

Q: How motivated are companies/managers to pursue strategies for disruptive innovation in the insurance market in Mauritius? (43.38s)

GA: I think they have to. They are conscious and they need to be motivated. Sometimes it is a question of survival. If they don't do it, they are out of the market, out of their jobs. **(43:46s)**

Q: Is disruptive innovation perceived as a threat by large established companies?

GA: it's on our radars…if it is brought on by a competitor, yes it's a threat. If there is an idea that we could implement it ourselves, it is less a threat and more an advantage. I would say both: it can be a threat and it can be an advantage as well. The concept of disruptive innovation is more, for me, an advantage, more of good thing than a bad thing. That's the way forward, that's how we'll have to do things and see things. **(45:03)**

Q: How easy or difficult is it for a new company to raise money from venture capital in Mauritius? (45.35s)

GA: I am not sure if we've got this aspect of venture capital in Mauritius. I haven't heard of it.

Q: Does the ability of a company to raise capital impact on disruptive innovation or the response to an impeding disruption?

GA: No, I don’t think so, if you want to raise capital, it can be done. It would be a barrier if you are new to the market, if you don’t have any background, experience or things like that..You need to start from scratch to some extent. But for the existing company that want to raise the capital, it can be done.

Q: Are there any policy/fiscal decisions which are encouraging disruptive innovation in the insurance industry?

GA: Not yet

Q: Are there any policy/fiscal decisions which are discouraging or preventing disruptive innovation in the insurance industry?

GA: I am not aware either of it.

Q: Since the insurance industry is heavily regulated in Mauritius, how are those regulations impacting or likely to impact upon disruptive innovation?

GA: That is a good question. It is all about does the regulator understand about the disruptive innovation. We need to make sure that what we’re working on is in the interest of client, within the legal framework. Sometimes, you just want to have a marketing campaign, you need to get review, approved by the regulators and it can take weeks. In the insurance world, if the competitors have new products, you can’t react as quick as you would like it to. We are all playing in the same playing field and we need to play by the rules.

Q: How would you rank the factors impacting disruptive innovation in the insurance industry in Mauritius?

GA: Technology would be ranked at the most. Capital is ranked second, knowledge is a third aspect. Knowledge of understanding the market because insurance is quite complex. Regulation is ranked as the third. What would be different is how the product will be distributed and how will you bring those products to the market, this is the way I can think that is going to change in the insurance industry in Mauritius and in the world.

3. Interview of Mr. Jason Siew, Assistant Manager in Distribution and Partnership – at La Prudence (Mauricienne) Assurances Limitée

Q: Can you tell me more about your business background and your previous experience? (0.11s)

JS: I have been working in the industry for almost 20 years. I started in the banking sector and also been in hotel, property industry. Then I have been in the insurance industry for more than 8 years now mainly in the investment for insurance, loans and all of that. Since 4 years, I have been specialising into life insurance and pension but mainly for the concern of Bancassurance in Mauritius which is a pretty new aspect in Mauritius.

Q: May I ask how I can spell it? (1.07s)

JS: Bancassurance. It is a French world. This is quite a new concept in Mauritius insurance. What it does is that it is buying insurance from banks. We propose our products to the bank and then the bank sells in to the clients. For example, when you go the bank to take a home loan in Mauritius, you need a loan cover. So you need to take a decreasing term assurance to cover the loan. What the bank does is that they will propose products from three different insurance companies.

Q: So the bank will propose the insurance services directly for the customer? (2.26s)

JS: Before the client had to go to the insurance company directly, now they don't have to. Now they want to take insurance, it is one stop is at the bank.

Q: Can you give me some background information about your company such as history, main activities and market, number of staffs? (3.00s)

JS: Mauritius Union itself and this year is 70 years of existence. In 2009 or 2010, they have been a merger between La Prudence and Mauritius Union. So today, Mauritius Union is specialised on

general insurance like car, households, medical and all that. La Prudence is mainly on life and pension- long-term insurance. We are approximately 400 staffs, Mauritius Union is 225 and La Prudence is 70 and others are supportive services like accounting, actuary, etc.
Q: May I ask if you have any appointment scheduled? (4.45s)
JS: You can have me until 10.30.

Q: What is your assessment of the insurance market in Mauritius today? (5.22s)
JS: I would say it is slow pace for the progression itself since the collapse of BAI. I don't know if you have heard of it, BAI is British American Investment.

Q: No, I don't think so, can you please tell me more about it? (5.38s)
JS: Since 2014, the actual government was elected. The first thing they did was to close the BAI and Bramer bank. BAI was the major player in life insurance, holding approximately 70% of the market. There are various reasons why it was closed and mainly the reason given by the government is that they strongly think it was a Ponzi scheme.

JS: So, when BAI was closed, even though Swan and Sicom have the highest market shares but they left some spaces for new players to come in. On this side, it is pretty much evolving. When Swan and Sicom had the greatest revenue, and portfolios; in the last 2 years, La Prudence has sold many more life insurances compared to them. You can get it on FSC Mauritius for the report.

Q: Have you ever heard of the term "disruptive innovation" before? (8.00s)
JS: Yes, I have heard about it.

Q: How would you define them? (8.06s)
JS: So, I would say innovation that creates the new market. For example, as I said earlier millennial and generation Z, so we are preparing to get them onboard. When digitalising, we are making our change management, so it will affect our functioning and we strongly believe that not taking the trend of technology will negatively affect the company. Ok. So I would say that for example

Bancassurance is practically is our best performer in the last three years. We can call it a disruptive innovation for the bank insurance. We are going into the process flow that usually the bank was doing to give the insurance before. Just for your record, so when you go to take the loan from the bank, you needed to fill into the proposal form and then it was underwritten, after that you got the premium and then if it is accepted, depending on the sum insured or if you prefer as the loan and the term itself. Then they gave you the list of tests and doctors to go for medical exam. What we have created is just a simple Excel. When you are front of the bank, it gives you everything like the proposal form, medical test generated depending on the amount and term. You can also book the appointment with doctor in front of the bank. So, you can do it all in five minutes in one stop. Before it was like days and days.

Q: Do you mean that customers can book the appointment and fill all forms by the machine? (11.28s)

JS: Yes digitalised. So, you can do it in five minutes, you don't have to revert to the insurance company or we revert back to give you the test. Now it is all done automatically by computer.

Q: May I ask which bank it applies? (11.47s)

JS: We usually work with most of the banks, MCB, SBM, MAU bank, bank of Mascareignes and Barclays.

Q: So basically, most of the banks here now offer this service (12.09s)

JS: But the customers have a choice to choose between 3 different insurances. It is a law under "Freedom of Choice Act". If they don't choose La Prudence, they won't get what I told you.

Q: So do you mean that Banque Assurance is only offered by La Prudence?

JS: No La Prudence is offered by any insurances but the way it was done, all the excel give you the appointment with doctor, it is only done by La Prudence. (12.55s)

Q: All right. **Has there been any instance of disruptive innovation within the Insurance Industry in Mauritius in the last 20 years? (13.20s)**

JS: Not really. But the most disruptive innovation recently is by the entrance Quantum on the market for the motor insurance. I guess you have heard about it.
Q: Yes, I have

JS: Personally, I think they have worked well for one year. But the thing is you sell at the lower price, when you have many claims, you can't keep up with the claims afterward. And they are not going very strongly actually. Yes, it is disruptive innovation but it isn't working well.

Q: You gave me the example of Quantum, so what do think made that kind of innovation possible? (14.40s)
JS: Hold on. I am reading the question again. I guess it is attractiveness of money.
Q: Do you mean the price sensitive?

JS: Yes, it is price and when they introduced Quantum into the market, they cut the price by 50% on the cost of brokers, agencies. Because you book directly with Quantum via online.

Q: Is there room for further disruptive innovation in the insurance industry in Mauritius? (15.20s)

JS: Yes sure, there is room for that. It depends on how customer respond to that. Let's say that you have to fill the tank every week, selling the car insurance on the filling station. Or buying the life insurance at ATM machine, it is a simple insurance cover that is not more than 50,000 Rupees as the sum.

Q: Do you mean that when customers withdraw the money, they can just click into a section to buy

life insurance?
JS: Yes, you put your card, they ask for cover protection with given terms of insurance you choose the service and then got the premium. No risk.

Q: What are, if any, the current barriers/challenges to disruptive innovation in the insurance industry in Mauritius? (17.57s)
JS: Not really. I don't think so

Q: So, don't you think that there are any challenges that can make disruptive innovation not to happen in Mauritius? (18.20s)
JS: Actually no. Because we are moving to the generation Z and the client is asking for that. Everyone is using mobile phone. They don't have time today, insurance just need to propose. It maybe not 100 % target on it but it is coming. Everything now is digitalised and policy, anything. Apart from law and regulation, apart from this, there is nothing.

Q: So, I just quickly introduce what disruptive innovation is before we are moving to the next part. The theory was born by Christensen; he is a professor at Harvard. He describes that when an incumbent ignores the customer segment which is less profitable them, then a new player with less resources bring something innovative to the market and focus on the unprofitable segment. Eventually, they take over the incumbent's market. For example, like Airbnb.

JS: Because they offer the cheaper services.

Q: What are the key factors that influence/determine the insurance business model? (20.30s)
JS: I would mainly say price.

Q: Is any other factors such as branding, etc.? (20.40s)
JS: Yes, maybe the brand, Swan has been there for 100 years and they are very competitive under

life market. Mauritius Union is more on general side. It is pretty much on those two. In between, you have Sicom, Sicom gets mainly the contracts from government, that is why they are big.

Q: Are those the 3 main players in the market?
JS: Yes. There is also a key factor I would say that strategy itself. For La Prudence, in the last 3 years, our strategy is to focus on Banque Assurance, so our profit has increased from 50 million rupees to 128 million rupees.

Q: This is a massive increase. So, does the profit come mostly from Banque Assurance? (22.37s)
JS: Yes.

Q: Does your company have a business model or strategy to bring disruptive innovation in the market?

JS: Yes, we are making a big change in chain management. Everything is digitalised. Before everything was done in paper, now the seller/agent will be provided the tablet. We try to give them the possibility that filling the proposal form directly and sign it digitally and send directly to the core system. It will change a lot for us. Before client had to fill in paper and then someone had to bring it to the office to have some else fill into our system.

Q: So, it saves lots of time and cost.
JS: Eventually yes. We also want to put Chatbot (Artificial Intelligence) into our system.

Q: Have you purchased them? (24.28s)
JS: Not yet, but we are doing it soon. Let me give you more details of what Chatbot is. Before if it is not office hours, when customer called at 7 o’clock, they wouldn’t be able reach anyone. So what

Chatbot does is you can have Chatbot on the phone and answer for you, or else can be set by SMS, it will reply to you. Artificial Intelligence. La Prudence will buy this after everything is digitalised.

Q: Are there enough resources allocated to allow the company to bring that kind of innovation? (25.30s)

JS: We are making space for that I would say.

Q: which space especially are you making? (25.37s)

JS: I would say making a space in a sense of we are catering budget for it. Cause it costs a lot of money for it.

Q: Do you mean capital investment? (25.50s)

JS: Yes, financial aspect of it. More staffs are educated on technology. We are planning in next 5 years to start recruiting young people who are already in a technology.

Q: How crucial are these resources to the process of disruptive innovation? (26.51)

JS: The mindset itself. We have seen that they don't want the change. Over 45 years old, it is difficult for them to change. They have been working with paper for so many years. Now they have to work on computer which is difficult for them and they are very slow on that. This is why generation Z will be the boost of disruptive innovation I think.

Q: Does the current structure and decision-making process have an impact on the process of disruptive innovation? (28s)

JS: No this is why we are working on the change management. We apply different models. Mckinsey is one model of chain management, it has 7 pieces called hard skills and soft skills. Hard skills are for processes and all of that. So we are trying to apply this model.

Q: Is this the main and only model that La Prudence trying to apply? (28.50s)
JS: Yes, mainly Mckinsey. Have you heard of Kotter?

Q: I haven't. Is it another model that your company is using? (29.10s)
JS: Yes. Let say that Mckinsey model is quite complicated. Each step depends on the other, people depend on process, and process depends on people. Kotter model is not that complicated. So we are trying to use both but mainly Mckinsey.

Q: Are the organisational structure and size of your company an advantage or disadvantage to bring disruptive innovation or to respond to a threat of disruption? (37.19s)
JS: What actually we are doing is we are transferring the administration to another department that we created especially for the digitalisation, which is called Business Capture. Before when we were processing all of the papers, it was done in the operation. Now new Business Capture under the Business Development, they can directly deal with customer, which was not allowed before.

Q: How can it be an advantage? (38.25s)
JS: It is an advantage because everything is done more rapidly. You don't really have to go through the whole process like before. For example, now when you capture the business, you can get the contract in the next day. Before it was done in 1 week because it had to through different channels.
Q: Now time is money and everything is decided by that.
JS: Exactly

Q: How do think it is a disadvantage? (39.19)
JS: It is creating malaise, like resistance to change.

Q: So do you mean that when the company structure existed for so long, it is more difficult to

change? (40.13s)

JS: Yes exactly. For instance, three of staffs change from administration to business capture, which means that the manager has lost three staffs under him. It is creating some frustration I would say.

Q: Now you know that there are lots of new entrants want to get into this business, what do think would be the barrier for them to enter to this market in Mauritius? (41s)

JS: I would say it is a capital. The capital has to be 25 million rupees to start with. The three companies as I mentioned Swan, Sicom, Mauritius Union have already been there for 70 years. So they already had brand, the market which is very difficult for them to enter.

Q: So, do you mean that firstly is the capital and secondly is a brand image? (41.45s)

JS: Yes

Q: Is competition aggressive in the insurance industry? (42.00s)

JS: Yes, but mainly between these 3 companies.

Q: Are insurance companies in Mauritius adopting new technologies to deliver their products /services? (45.40s)

JS: They are starting to. The two main ones are Mauritius Union Assurance and Swan. I can't see Sicom going for this in the next 5 years.

Q: Do you mean that Sicom doesn't adopt any new technologies?

JS: They are already holding the Government business so I don't see they need to do this.

Q: Do companies value technology as part of their business strategy? (46.35s)

JS: Yes, for us.

Q: Is the adoption of technology in the insurance industry driving disruptive innovation? How? Why? (47.00s)

JS: Yes. It is making the business easier. I already refer to the time. Before if we received 1000 proposals from SBM, it would be pending; because we can't finish all of it within two or three days. But now we have come up with a digital solution, all information that we need is input on an Excel and is converted directly to our system. So what it was being done before in seven to eight days, now it can be done in not even two days. And also of course, it is less prone to errors.

Q: How well do you think managers or insurance companies in Mauritius understand the concept of disruptive innovation? (49.00s)

JS: They are forced to understand. For us it is the strategy of a company. We receive the training to understand how rapidly it is changing due to technology, innovation. With the training provided, it helps a lot. We also experienced the digitalisation itself in other companies, not for conference in Mauritius but we were sent to abroad for more exposure to the insurance market. (49.51s)

Q: This is a very interesting part. I was always curious about the networking conference.

JS: No on digitalisation, you may have Fintech for bank but not on InsurTech. So, I was sent to Cape Town, some were sent to Malaysia and all of that.

Q: So basically, La Prudence has the strategy to send the manager abroad for networking and learning? (50.40s)

JS: Yes, for learning, networking, raising the awareness, experiencing to know what's going in the Insurtech. What can be done or introduced in Mauritius. We can't introduce everything that they do abroad because we are in a small market.

Q: How well do you think managers/companies are able to recognise patterns or signs of disruptive innovation happening in the industry? (51.25s)
JS: I would say 60% of managers are involved in that. Most of our managers are from 30 to 40 years old, we are pretty much millennial and we are not having difficulties to understand the concept of disruptive innovation.

Q: Let say there is a small company in market and nobody pays attention on them. But they have a potential to displace or taking the customers away from the incumbents, can manager recognise this? (52.25)
JS: It takes around 1 to 2 years to recognise it and it is happening right now with us. We didn't have any percentage of the market in banks. This is why we came up with Banque Assurance strategy. Swan lost some customers to La Prudence because of the strategy Banque Assurance. I believe Swan would come out soon with the new strategy.

Q: Is it 1 or 2 years to recognise too long? (53.27s)

JS: Let's take SBM as an example. SBM has 1000 life insurances from home loan covers. Swan had around 40% of it, Sicom had 50%. What was left only 10% for La Prudence. Banque Assurance from La Prudence took 30% from Swan, they thought that it was because Sicom. When La Prudence took 30% from Sicom, then they thought it was because Swan. They have never thought that La Prudence was the one who took from both of them. After 1 year then they learned to realise it. For them we are a small player and they were underestimated us.

Q: Don't they do the market analysis? (55.00s)
JS: Yes, they do, it is on FSC. But FSC doesn't tell you where the trade comes from. It could be from individuals, corporate, agents, brokers or can be from anywhere.

Q: Is there sufficient competence to bring disruptive innovation in the current market or to understand or respond to threats of disruption? (55.38s)
JS: Yes, we do need more expertise from abroad who have already experienced this kind of innovation. La Prudence also has a partner from Cape Town and we are sometimes doing some exchange training. It is a new strategy for us.

Q: Is there an innovation culture within the insurance industry? (56.25s)
JS: I won't say in the insurance industry, maybe for three companies Swan and Mauritius Union, also Quantum. Apart from that I don't see any in Mauritian cultures.

Q: What kind of innovation do insurance companies in Mauritius tend to value? (57.09s)
JS: Just follow the trends I would say. It is not an innovation; they are just copying from somewhere else.

Q: Does the management culture in Mauritius enable disruptive innovation or is it barrier to disruptive innovation? (57.45s)

JS: it isn't a barrier. We will have to try and if it works, it works. We are having a new generation coming; they will purchase things online more. But it is properly coming in 10 years but not now.

Q: How motivated are companies or managers to pursue strategies for disruptive innovation in the insurance market in Mauritius? (58.20)

JS: For my part, personally, I am up for it because everyone is now connected nowadays. I think if the managers are not motivated, they should be because disruptive innovation is the future.

Q: Is disruptive innovation perceived as a threat by large established companies? (59.12s)

JS: No because Mauritian culture tends to stick to the existing companies. It is maybe in the future but not right now. Just like Quantum, it is just for 1 year and I guess it will be gone soon. Even though Quantum has a capital, they target the mass market with a low-cost offer. Mass market means you take everyone on board including those with high loss ratios, when too many claims are made, they can't handle it.

Q: Do companies or managers implement strategies to counteract threats of being disrupted? (1.00.00s)

JS: Not really. Because they don't think it is a threat. Quantum, they are aware of it but they can't do anything anyway. Because offering the lower costs with high loss ratio, they know Quantum can't handle it. La Prudence had the strategy of lower prices for three months and after that we went for higher premium because we couldn't bear the loss ratio, even though we targeted the high premiums.

Q: How easy or difficult is it for a new company to raise money from venture capital in Mauritius? (1.01.47s)

JS: It depends if we have a government backup. Everything in Mauritius is networking. It is a question of does the investor want to invest in Mauritius where it has lots of corruption and a small population size. You can argue that Singapore is also just the same population as us but I am sorry that we can't compare with them.

Q: Does the ability of a company to raise capital impact on disruptive innovation or the response to an impeding disruption? (01.03.35s)

JS: Yes, I guess it does. If you don't have money, you can't innovate, mainly digital innovation.

Q: Are there any policy/fiscal decisions which are encouraging disruptive innovation in the insurance industry? (01.04.16s)
JS: Not yet.

Q: If it is a No, then are there any policy/fiscal decisions which are discouraging or preventing disruptive innovation in the insurance industry? (01.04.25s)
JS: No, I don't think so

Q: Since the insurance industry is heavily regulated in Mauritius, how are those regulations impacting or likely to impact upon disruptive innovation? (01.4.46s)
JS: I don't think they can. What has been encouraging for us to go for innovation is a law "Free of Choice Act" that was introduced three or four years ago by government. This law said that any bank has to propose three insurance companies at least; before it was done networking like MCB was with Swan, SBM was with Sicom, and clients didn't have a choice. So now the client can decide which companies they can choose from those three insurances.

Q: If it is for this aspect, do you agree that it is encouraging the disruption?
JS: Yes, I agree.

Q: How would you rank the factors impacting disruptive innovation in the insurance industry in Mauritius?

JS: I would say that the strategy to make everything done faster would be my first factor. And the technology lies behind it, so would be my second factor. The third factor is the change of the mindset of younger generation. And the fourth factor would be regulation from the government

Q: Thank you so much for your time. I learnt so much today and I am sure your valuable information is helping a lot for my thesis' analysis.

4. Interview of Mr. Devesh Biltoo, Chief Operating Executive at Quantum Insurance

M: Now we will start with the background information, can you please tell me more about your business background and your previous experience? (0.50s)

DB: Is it in Quantum only or?

Q: Not necessary, it also can be your personal previous experience (0.55s)

DB: I am the CEO and currently the officer in charge and the Executive Director of Quantum Insurance. And personally, I had 18 years' experience in the insurance sector in Mauritius. And I started my career in health insurance and then gradually moved to general insurance. I am a qualified chartered insurer from the Chartered Insurance Institute from UK. And I was the head of underwriting for one of the biggest insurers in Mauritius.

Q: May you tell me for which company you were the head of the underwriting? (1.42s)

DB: For Mauritius Union. And after 15 years of working in the insurance industry, then I came down to the Quantum Insurance which is a green field start-upstart-up insurance company where we started the development in 2015 for Quantum to be in operation in November 2015 as an online and direct insurance company.

And from my experience as the in technical underwriting for the past 15 years, you could say that the market in Mauritius is highly intermediated market driven by intermediaries and brokers. And we also realised when Quantum come to the market, compared to other sophisticated market, the Mauritian market is quite laid back, has not really evolved. This is where obviously the shareholders

of Quantum Insurance found that there was an opportunity to set up an insurance company which would adopt the strategy of being online for the retail business and obviously capital intensive in terms of investment.
Q: So that was the motivation to start Quantum Insurance. (3.35s)
DB: Yes. Because one of the directors for the Quantum Insurance has had pretty much exposed to the re-insurance in Africa. They have seen that over there in Africa, every year they have a new insurance company cropping up. And it is only in Mauritius for the past decades, there has only been consolidation among the insurance players on the market. They have not really evolved in terms of what their offering is, or their positioning is compared to other sophisticated markets. This is where Quantum Insurance found that there was a space left and to be exploited in the market where it proposes to be a one hundred percent online direct insurance company, direct in a sense of what we do not work with any agency model, or with any broker. We are completely disintermediated.

Q: Is this how you cut the costs?
DB: Exactly. It cuts the middle man which means that the offer obviously is proved to be more competitive because there is no layer of commissioning or expenses in terms of additional cost in acquisition process of business. And secondly a fully automated system of online generates productivity gain from your IT automated setup, it generates the efficiency and productivity gain. Because from the online setup, everything is rule-based in terms of underwriting, so there is less human intervention in terms of doing an underwriting process where everything is rule-based and then you get the payment gateway which is also attached to the process so it clears all of the payments. And only cases where there are validations or there are exceptions that comes to as a cue in the underwriting process. So, in some way for the personal line which are standard commoditised products, you know the experience is seamless when it is online. And it is fully integrated with all platforms including re-insurance payments, policy processing and everything is automated.

Q: Since the price is low, what is the main customer that you are targeting ? (6.41s)

DB: If it is online, you can just only do the retail business, just personal insurance. Because corporate business is obviously more complex, you need to underwrite them by the nature of the risks, nature of business of activities. So you can't do essentially corporate or commercial business online, ,you can only do retail business online because it is rule-based. You set what you can call the underwriting parameters in accordance with the profile of the risk, and based on the information being provided by each individual.

Q: Have you ever heard of the term "disruptive innovation"? (7.24s)

DB: Yes. Our business model in some ways a disruptive model for sure.

Q: Then how would you define them? (7.34s)
DB: Well disruptive innovation is obviously an innovation or a way of doing business which is transforming the way the customers would look at its current experience. And obviously with technology coming in, it is not in any way that alienating the customer from his needs that he has. It is a new way of the customer transacting with his insurance needs from the insurance perspective.

Q: Has there been any instance of disruptive innovation within the Insurance Industry in Mauritius in the last 20 years? (8.25s)
DB: Well in terms of insurance, no, not really. Because there have been companies who have what I would say an online presence, but it is not really an online insurance transaction. Because a seamless insurance transaction online would mean that the guy sitting in his home get to the insurance from the start to finish without having hassle, either picking the phone or visit the office to finalise the transaction.

Q: So do you consider Quantum as one of the example as a disruptor? (9.10s)
DB: Yes exactly. Because someone can pay online and get their policy delivered in real time in their mailbox.

Q: What do you think made that kind of innovation possible to make Quantum as a disruptor in Mauritius? (9.30s)

DB: Firstly, because obviously it is technology. If you look at the penetration rate in terms of mobile subscriptions, smart phone subscriptions in Mauritius, and how easily the market is adopting the latest technology or online purchase pattern in Mauritius. If you look at it, it is only in the insurance sector that there hasn't been really a major evolution or progress in that aspect.

Q: Do you think there is any room for further disruptive innovation in Mauritius? (10.45)

DB: in the insurance sector?

DB: For insurance sector, for sure. What we've noticed since Quantum has embarked on this model of online, we had a first mover advantage and the others are trying to catch up. But one of the drawbacks of the other existing companies trying to catch up is obviously their legacies (11.10). If they are having a legacy of intermediated business, it is quite difficult or challenging to make the two models to co-exist simultaneously.

Q: What are the current barriers or challenges to disruptive innovation in the insurance industry in Mauritius? (11.45s)

DB: Yes, I mean one of the challenges obviously is that firstly it is capital intensive investment. You rely on technology and technology doesn't come for cheap. Secondly you don't get recognition from an accounting standards perspective because all your entire asset is purely intangible assets in terms of IT investment.

Q: Can the way Mauritian customer purchase products or services be a challenge or barrier? (12.30s)

DB: Obviously I mean in the insurance sector, being a financial transaction, people would not easily embark on the online without knowing who are the persons behind the company or the technology. Given that it is about insurance which is an intangible product itself, people got to know , like with any financial institutions, whom they are dealing with. So essentially, there is also, when you are a disruptor in the financial sector in Mauritius and you are a start-up operation there is always that legitimate apprehension of people saying that this is a new company coming into place and they got to build the trust in the company. So, trust remains one of the important factors. It is something where if you are disruptor in financial sector; you got to make sure that your brand positioning .. is important. It is important for a company to make position out there well. And you also make sure that you can also communicate on your solvency aspect and on your financial solidity or stability.

Q: So now we are moving to the part of the company and disruptive innovation, what are the key factors that influence or determine the Quantum Insurance's business model? (14.40s)

DB: The first thing is the technology behind it. As I said, if it is capital intensive, it means it is less labour intensive. One that would qualify the model from a market perspective is that it is easy, it is hassle-free and it is quick. Obviously from an operational perspective, there is a productivity gain and efficiency. And from both market and operational perspective, because of the productivity gain, the efficiency, there is also a competitive pricing which benefits both. Because the cost is low in terms of not having layer of expenses in terms of acquisition costs and so on. So the market benefits, the operation benefits because it is less labour intensive.

Q: Does your company have a business model or strategy to bring disruptive innovation in the market? (16.20s)

DB: Yes definitely. As I explained for you, technology is something that can be copied; technology is obviously something which keeps on improving or changing at a rapid pace. So, if you want to maintain your first mover advantage into that disruptive model, then you got to keep on introducing new features and keep on bringing more what you call UX elements (user experience). And one of the examples when we launched our online model, then we introduced what it is called Myspace account - where client has a personal space online to view all his policy transactions, his claim registration and renew his business online. And then we introduced other things like Live Chat onto the system.

Q: Live chat system has become very popular now for the most of business. (17.58s)

DB: Yes

Q: So, the Myspace account is some sort of like Internet Banking (18.14s)
DB: Yes. In fact, the online portal... web portal is integrated with a payment gateway and the payment gateway is integrated within the system where it does the caring and validation of a credit card or debit card transaction. It validates in real time and it is a secure transaction and then in real time it sends a message to the core system to say that the payment has been cleared and it generates the transmission of all policy documents into the mailbox of clients in real time. If I can briefly just give you a brief of how the setup of the IT is. You got an online portal which is a web portal, and this web portal communicates with the core IT system which encompass all the algorithms and the validation process. Sitting with that core system, there is a payment gateway which is integrated in the portal and that validates all transactions for the payment processing. And once the payment is cleared, it sends the message in real time into core system to say that now you can push the documents or policy out, and there is also within the system an email and an SMS gateway integrated within the system. The system is the web-based system so it can communicate with other APIs like payment gateway, email gateway, SMS gateway in real time. And the whole of the setup is hosted on Amazon web services in Singapore into cloud system. All of our operation is not hosted on the local server but hosted on cloud.

Q: I didn’t know that Amazon had a cloud system (4.55s)
DB: Yes, it is massive thing, it is sitting in Singapore and you know that we are part of the Hertshten Group. The major shareholder of Quantum is the Hertshten Group. Hertshten Group is one of leader in online trading, futures, derivatives trading in the world. So, they got they got operations in India, in Israel. There have operations in UK. And they also hold a clearing agency in Chicago and in UK and in Hong Kong. So we’ve a bit leveraged onto their IT knowledge because when an online transaction, the trading is done, it has to be done in a milliseconds. So, the group already had a team of IT and application developers in Israel who obviously helped us into putting in place all this setup in Amazon Web Service.

Q: The human resource is very important factor in Quantum? (21.45s)

DB: Human resource I would say IT human resource is very critical to this business. And you really got to have people who got the expertise both in the system engineering and from an implementation perspective to really make that system work seamlessly. (22.04s)

Q: Does Quantum have most of IT staffs from abroad or does it hire locally as well? DB: It shouldn't be local, you can have it abroad as well. But obviously that you want to have certain flexibility or to have a certain competitive advantage, having a resource in-house gives you an edge.

Q: What other resources do you think it is essential apart from human resource and technology? (22.40s)

DB: Well it is an insurance business; you will need obviously insurance people with the insurance technical knowledge. Because it remains the insurance business even though it is to do the transaction online, but from IT perspective as I said is system engineer, web developer, we development specialist, you will need programmer, developer, business analyst understand your business requirements in terms of IT perspective, it can obviously create the business logic. From the business logic they could convert into algorithm.

Q: How crucial do you think these resources to the process of disruptive innovation? (23.41s)

DB: As I mentioned, I think it is critical. You couldn't do without them. You want to have a really disruptive model, you got to make sure to get people that are really know the latest development, how update they are. And this is obviously a sector or a field that you got to have people constantly update their skills both in terms of technology or language programming or new technology features.

Q: What is the decision-making process like within your company in respect of business strategy and resource allocation? (24.56s)

DB: In term of business strategy, you have the board of directors and the chairman that set the strategy for the business. The execution of this strategy, it obviously translates into the operation by the heads of the departments both technical and support department. And the day to day decision-making is obviously some of them are well defined within the system itself, they are what you call mandatory levels. Each product has got defined parameters which are embedding into the system itself and only exception; cases require the validation from outside the system then handled by the respective department.

Q: Does the current structure and decision-making process have an impact on the process of disruptive innovation? (26.20s)

DB: Yes of course. Because the decision process some way embeds into the system for general underwriting cases. Like I mentioned you are only underwriting by exception where it obviously the decision is taken out of the system. But the system is some way configure that it is what you call rule based. So you set your rule within the system, and the flows of transaction are obviously being validated. And all of processes are then set within the system as a workflow.

Q: It is quite an intensive involvement of technology and the right people for skills (27.37s)
DB: Yes definitely. If you look at the implementation process, it was a green field operation. We started from nothing. The IT aspect of it means that you need to get your product book which all criteria, parameters, your products' definitions right. Because when you develop the system, the system comes with a core layer and then a custom-made layer. And the system will follow what the requirement of business is in terms of making the processes efficient, effective and also making sure that it can generate productivity gain because it can accept the volume of transaction and be scalable at the same time. Or you can call scalability that you can leverage on. This is the advantages of using technology that it kept providing you scalability. Scalability means today you can deal with hundred policies a day, you can also deal with thousands of policies a day and the system is still efficient and effective.

Q: Since Quantum business model mostly involve purchases online, the customers would mostly purchase the general insurance? (29.05s)

DB: General insurance is mostly home insurance, travel insurance and insurance buying online. Most of people, there are couple of lines of business that are more supported online like travel insurance and it is last minute buy. And from what we have witnessed so far is that telephone remains one of the channels where people still privilege as when transacting insurance. It means that people do half of the transaction online and then they phone to convert the transaction over the phone. But still the transmission of documents is done remotely through the online.

Q: For the part of structure, size and level of competition, do you think that the organisational structure and size of your company is an advantage or disadvantage to bring disruptive innovation or to respond to a threat of disruption? (30.20)

DB: Do you mean the size of the market of what?

Q: Let's say Quantum's size or the structure of Quantum

DB: I think it is an advantage. It is all about the resources that you're using at optimum cost, optimum using of resource...which obviously reflects on to how you better control your management expense, your cost, operating cost of the business. Because as I explained initially, the business is designed in such a way that is scalable; doing more transactions which means you should not add more in terms of labour resource.

Q: What are the barriers to entry in the insurance industry? (31.33s)

DB: One of the barriers as I explained it to you, it is a massive capital investment. That massive capital investment until you got to amortise the depreciation of your IT asset. IT asset is do depreciate quite rapidly over the time. So, we at Quantum level, we decided to deal with the IT depreciated investment over 5 years. This is one of barrier to as the disruptive model. And secondly as I explained it to you, in terms of the solvency calculations, capital requirement calculations from the financial regulatory perspective, there is no recognition from an accounting perspective for IT investment because they are not qualified as being tangible assets. Even though when you look at it the business in itself rests onto IT which is heart and soul of the company without the technology, the company doesn't exist. But from accounting perspective, you don't get this recognition as this being an asset.

Q: It is very interesting that I didn't think of it.

DB: That asset is purely as an intelligence asset. Setting the business with this model, this is an intelligence that you have. From the accounting perspective, this is not a hard-held asset. It is not like a building you own where you could evaluate them then you say this is an asset and you contribute to the asset of a company. I think it is a general concept of what is likely going to attract Fintech start-ups in Mauritius or not. Because if the regulatory recognition of those assets being recognised within the accounting book or not. This is what going to play out to attract. As I said this is a massive investment and we know from our own experience that half of the paid-up capital went into that IT development. And our shareholders are strong enough to believe that we created the model that can be expanded into other territories. That's why we didn't hesitate to invest that massively into technology. But for other start-ups that is going to come, this is a barrier to it. Because it's massive investment that would help in adding to their solvency calculation because you got to put aside and consider it as a sunk cost rather than really an investment as an asset into the business which is taken care in financial solvency.

Q: Is competition aggressive in the insurance industry? (35.32s)

DB: Yes, the competition is very aggressive in Mauritius for sure.

Q: Does that explain the prevalence or lack of disruptive innovation? (35.41s)

DB: I think the lack of disruptive innovation because it is highly intermediated market where insurance company has the heavy legacy of intermediated business. It is the legacy issue that they are having that can't them get to embark onto the disruptive model. Because as I explained to you, such a disruptive model can't coexist with the legacy of intermediated and brokers-driven business on the retail side; if you look at other sophisticated insurance market in Singapore or in Europe, everything which is retail insurance, they are moving from an intermediated channel to a more direct channel. I think this is a trend and it is likely to be that way in the future. In the same way, you don't see the travel agents in Europe and other countries because they buy their tickets online. It is the same thing that we have.

Q: Are insurance companies in Mauritius adopting new technologies to deliver their products or services? (37.14s)

DB: Since Quantum has come up to the market, they are also trying to improve their online presence. They are also trying to offer their online insurance.

Q: Do companies value technology as part of their business strategy? (37.47s)
DB: Yes

Q: Is the adoption of technology in the insurance industry driving disruptive innovation? (38.00s)
DB: Not really. For Quantum yes but for the others I don't think so. The uses of technology for other insurance companies are mainly try to drive their internal costs base and to generate their internal efficiency. But if they have to adopt technology as the disruptive force, it will definitely mean that they will have to adjust their labour cost base which means that they will have to go for the massive retrenchment of their labour resource. As I explained to you, this is a very disruptive technology is no different than an economic model where you're saying you want to be more capital intensive so you're going to be less labour intensive. I mean this is only the equation and, in that equation, it only works this way. You can either be labour intensive and less capital intensive or if you decide to be more capital intensive, you got to be less labour intensive. This is the equation of how it is. Any existing company sitting with what you call legacy or having with what we call fats (39.34s) in their operations which mean that they are not lean into their operations. They are not cost effective. Embarking on the technology would mean that they must adjust first their internal operational inefficiencies, one of the ways they to address it would obviously means to use technology to make the processes become more lean(39.59s). And if they do it, the impact not to the business but it has social impact. That social impact means that they have to retrench people

because they are going now to be less labour intensive. If you look at the current insurance company, they are very much labour intensive. So obviously the technology or whatever they embark on in the way of disrupting the model, it means that they must first disrupt their own business model. You cannot embark on disruptive model without, I am talking for the others because I worked in a traditional insurance company before which is currently highly labour intensive, which is highly intermediated... it relies a lot on agency model, on intermediated model of doing business. One of their challenge is if they embark on technology driven disruptive model, they will have to adjust internally.

Q: This is a very interesting fact. Considering the fast pace of change in technology, insurance is one of the industries which is quite laid back. (41.16s)
DB: Yes, it is lagging behind [...]

Q: So, we only have few questions left to finish the interview. **How well do you think managers or insurance companies in Mauritius understand the concept of disruptive innovation? (48.45s)**

DB: To be honest with you, one of the key challenges for the disruptive model for people to understand is a culture adoption. It doesn't mean that if you have 10 or 20 years' experience in the insurance sector, you are ready to embark onto a disruptive model. I experienced that when I set up the company, everything is to do with culture, with people adopt. People are adopters of a new way of doing things, people are adopters of the technology, people adopters of how effective that technology is going to be disruptive. If they don't adopt the technology the way the technology should be adopted, the model will not be disruptive; it will just be another model which across time will converge instead of being disruptive, it will just be the follower of an existing model. And we have seen it here, at the end of the day when we put in a disruptive model it is the people behind that, the users that you call them. Are the users ready to embrace that technology? How do the users walk in here with the mindset that they are too used to their previous technology, that they cannot shift onto a new way of doing things, a new way of using the technology as it should be used. This is the biggest challenge.

Q: Now we can see with the younger generation, they are readier to change their minds.
DB: This is a key to it. When you got a disruptive model, you've got to make sure you've got a very young and dynamic staff base, people who can recognise themselves in the technology. If you bring in people who are in the industry with 20 or 30 years of experience with a previous way of doings things or a traditional way of doing things, it is difficult to get them to embark onto disruptive model. So in essence, when you look at start-up model like Quantum and you look at the staff age here they are pretty young. You got to get people who are willing to work in a setup where they are more conducive to using technology and they are identifying themselves in there.
Q: This is also the problem where I interviewed the traditional company as well.
DB: In fact, I can tell you that we did encounter some failures with people(52.15s) whom we brought from the industry which we thought they have a technical knowledge of insurance but they couldn't adopters of the technology. You see they have their own way of doing things which was in a traditional way and it was difficult for them to get rid of those bad habits of traditional ways of doing things and to embark into new ways of doing things. This is something which is, I think, it is very critical or you may add it, if I can put it that way, to how successful of disruptive model will be depend on who are the people behind that, or If you want to put it like this, driving that model. (53.02) the model in essence could be a disruptive one, if the people driving the model are still stuck in the traditional way of doing things, the disruptive model will die out very quickly.

Q: How well are the managers or the company able to recognise the patterns or signs of the disruptive innovation happening in Mauritius? Let's say, for example, when Quantum came to the market, after how long could the other companies started to see that this can disrupt their business model?

DB: I think it happened over the first 6 to 8 months of Quantum being here. Since we launched into the market, the other companies have reacted by dropping their prices. They have reacted also by trying to bring in some applications, insurance applications, mobile apps. Whereas we haven't embarked into the mobile app – they have embarked on it without having the technology behind it. When we are going to embark on it, it's something which is going to be seamless. But they are just embarking on it, it's only to keep pace with the technology. And they have reacted for sure within the first 6 to 8 months, and we've seen that they are communicating more and more on social media. The social media is just a media to engage with people.

Q: Is there sufficient competence to bring disruptive innovation in the current market or to understand/respond to threats of disruption? (55:46)

D : In terms of bringing the disruptive model in the market, locally I don't think we have the sets of skills because as you know, we came to realise that there is a shortage of programming skills, people who were expert in programming in the market. That's why you see in the last budget the Prime Minister said that we got to open up or try to encourage people at an early stage of their academic path to embark unto programming. (56:21)

I can tell you that we're on to Java programming for our core system, our portal is based on AngularJS, and bootstrap, but you hardly get the skills here. there's a scarcity of skills or we should call it there's a mismatch between what the technology requires from a skill set and what the local academic institutions are producing in terms of skills.

When we did the integration into the cloud system in Singapore, (57:00) if we didn't have the IT experts from Israel within the group we wouldn't have a local resource that could have done that deployment onto Amazon Web services. (57:15)

Q : So in Mauritius , do we have that sort of networking conferences. Let's say that all the investors that came looking for the new idea or the new young people...

DB: No, they haven't yet set it up in Mauritius. That this networking could really create really young start-ups people with investment mind of saying. .... you know investing in a start-up is a truly entrepreneurial skill set and you've got to be really putting your money where you're sure that the return is not overnight but it's much more about looking at a trend. If the trend is good then you're

in the good direction. it’s not about how much you’re doing but if you are following with the trend. And you got to have patience. You got to be patient with a capital intensive ....
As long as the market trend is good, it means you are in the right direction. Because if you want to be disruptive you’ve got to realise one thing – you’ve got to look at the way the market is in five years’ time or ten years’ time and you’re doing your investment for that market in 5 years. You can’t just wait for the opportunity to be just there and say oh the market is ready; I’m going to do it now. The market is ready yes, it will be ready in the next 5 years or 10 years’ time so you’re got from right now to start building your model right now for that market in the five years’ time. There’s nothing as a disruptive model that comes and changes everything at one go.

Q: So, do you think that the size of the population in Mauritius is somehow kind of a barrier for the investor to come.

DB: For sure, the retail market is very small, definitely this is a very small market and the investment does not commensurate with what is the market potential from a retail side. You can only come and prove your model here and use it as a laboratory experience, just like as I explain to you, a start-up disruptive model will come to Mauritius if it has a project of expansion need. In some ways, like we did with Quantum you create the model here and you replicate it to other territories.

So, this is more of an expansion model (1:00:10)

Q: Is there an innovation culture within the insurance industry?

DB: Well, not really. There’s no innovation culture. In fact, the insurance industry in general if you compare with the banking sector, is the one which is lagging behind in terms of innovation. (1:00:43)

Q: What kind of innovation do insurance companies in Mauritius tend to value?

DB: They value innovation in terms of product innovation. They do product innovation but they don’t value as such the service-end innovation and they don’t value as such also innovation in terms of new ways of doing things of transacting insurance. It’s all about user experience. (1:01:22)

Q: Does the management culture in Mauritius enable disruptive innovation or is it barrier to disruptive innovation? How so?

DB: I think it is a barrier, the management style. Because, as I explained to you, you know most insurance industries in Mauritius – if you look at the first 5 insurance companies in Mauritius form part of a captive holding. If they are part of a captive holding, and then obviously the strategy is based onto the captive major shareholding deciding on what strategy they want to embark upon.

It also relates to the legacy aspect. Say, you have your management that is obviously not bold enough to say we want to change the model and move to the other way. It's primarily about how risk takers the shareholders are or to what extent they really want to shake the current model and really challenge the existing model. (1:03:00)

Q: How motivated are companies/managers to pursue strategies for disruptive innovation in the insurance market in Mauritius? Why?

DB: Disruptive model technology it's like you are pregnant. Either you are pregnant or you are not pregnant, you can't be half pregnant. So, if you look at the way how people are motivated with the technology first, rather than going to the disruptive model, they are not using technology to the maximum. They are using technology in a half-baked approach. In some ways, the market is not making use of the maximum advantages or the maximum gain that they could get from the technology, they are just using the technology to address half of the solution to a problem. but not really using technology to the end. (1:04:28)

How motivated they are, this boils down to how motivated their managers or business leaders are to embark on disruptive business models. Firstly, as I explained to you. it's how ready are they to confront or challenge their own organisation structure of the company to bring in (1:05:08) that disruptive model. The essence of it, as I explained to you in the first stage, if you are an existing service provider and you want to go into a disruptive model approach. You can only get 2 approach to do– either you do what you call an inorganic way of growing which is you buy an insurance company that is already technology driven or else you got to revisit your whole operations or your whole structure.

Quantum started from scratch. We didn't buy any operations; we didn't transform any operations from traditional to online. We just started from scratch, from the green field. We're a green field operation (1:05:48)

How motivated are people to adopt disruptive model, I mean managers or business leaders; if it's a start-up I think it will be easy, they are willing to. If they got to re-engineer their existing structure to bring in the disruptive model, it boils down to how willing are the shareholders to invest or really take that risk.

Q: Is disruptive innovation perceived as a threat by large established companies? If no, why? (1:06:31)

I would say not for the time being, even though they are seeing that their...

The disruptive model is not affecting their market share, in essence, but it is affecting their cost base, their cost of operations. They are still hanging onto their market share but they 're really taking a bad hit onto their running operating cost which means that their profitability is at stake.

So, in terms of the marker share, they are not losing much but they are taking a hit on their profitability because they are not being able to contain their operating expenses or their operating costs. (1:07:47) Whereas a disruptive model what it first gives you, it gives you a very lean operating cost and then it allows you then to reach to a bigger market and to make sure that this operating cost is within control. This is what I told you the key essence of the disruptive model is first it gives you productivity gains and efficiency within your operations. Once, you've ensured that you really have a lean and great model, and then the model is about scalability. If you are writing today 10,000 policies, you can write 30 000 with more or less the same cost base or the same structure or resource. It doesn't work as a proportion which is directly correlated to the current plan.

I give you an example. In two years of operation, we are already at the same level as one or two insurance companies in Mauritius in terms of premium income. In our first two years, we already crossed one or two companies starting from the bottom, one or two insurance companies which were there for 50 years in Mauritius. If you look at our resource, our staff, we are operating at a third of what is the resource staff deployment at the other company just because of the technology. If they are employing 60 people, we are doing the job for the same amount of output with 20 people, and that what technology allows. (1:06:56)

This is where the disruptiveness of the model starts really, how much of resources you need initially to give the same level of output as someone else is giving. (1:10:21)

Q: How easy or difficult is it for a new company to raise money from venture capital in Mauritius?

DB: It is really difficult. You know, our shareholders invested the money here, it is really paid up which is not coming from any loan…... the company is not geared at all.

They didn't borrow money from any institutions to invest in here. It is just money raised by the shareholder from within his operations. It was just his profit he made; he put in the money as paid up capital. It is capital that was paid up from the beginning. It was not money borrowed from any bank with a collateral or security – it was just paid up capital (1:12:00)

Given that today, that the interest rate is very low and It is obviously the environment for people that has got the money, that has got excess capital to invest that are going to put it in the disruptive model. Because the interest rates in banks are low and the rates of return on major financial investment are low, so people with excess or company with excess capital or surplus capital are those who are likely to put money in the disruptive model.

But they need to have sufficient amount of money because it takes few years … and also because in a disruptive model the rate of return is over time it is not a quick turnaround. With a low interest rate market people can be patient to wait (1:13:10) for the return on equity.

Q: Does the ability of a company to raise capital impact on disruptive innovation or the response to an impending disruption?

D : The capacity to raise money for a disruptive model...it all boils down to what is your business plan, how really solid is your business plan because investors want to look at the disruptive model in the long run rather than in the short-term. If you are going to put your money on a disruptive model, you've got to be a long-termist rather than a short-termist. (1:14:11)

If you want short-term return on your equity or investment, you'd rather not go into …….

Q: Are there any policy/fiscal decisions which are encouraging disruptive innovation in the insurance industry? Please give examples.

DB: No, there's none. Not yet in Mauritius. This is the problem. They want the island to be in Fintech. There's no fiscal incentive, there's no regulatory incentive in terms of IT asset recognition, in terms of accounting or solvency wise. (1:14:43)

You create the goodwill. The goodwill of a company, of any business, if it is a disruptive model you build the goodwill from the technology. If the technology from an investment perspective does not have recognition in the balance sheet as an asset, then you're not really valuing the goodwill of the business.

Q: Are there any policy/fiscal decisions which are discouraging or preventing disruptive innovation in the insurance industry? Please give examples. (1:15:23)

Q: In Mauritius... I think. Our regulatory framework, from a financial perspective. Accounting is one, second is that from a regulatory framework... I think our regulatory measures, our regulatory provisions; our legal statutory provisions haven't been updated or haven't obviously been reviewed in connection with technological advances. I just gave an example, the Electronic Transactions Act of Mauritius, how updated it is to reflect the online business transactions that are happening. How the Insurance Act in accordance with online insurance transactions, how are the laws of contract which are the Napoleon Code which are dating back to eighteen something in line with online transactions. Those are the things that you know...and I remember when we launched Quantum Insurance, the regulator came here before we launched the company on a study tour…. they call it a study tour, because they wanted to see how an online insurance company will operate and then they setup then what is their guidelines of insurance online. They based the guidelines of insurance online based on how Quantum was doing the insurance online. (1:17:14)

But the point is that they just addressed partly, they did not address the whole setup or the whole regulatory environment within that because an online business is how you make it enforceable by law, how you make the laws to follow you know those kinds of transactions. This is where I think we are a bit laid back in the sense how fast are the regulatory bodies, how fast is the state law office keeping pace with ways of doing business. Are there laws that have to be enforced? Are there laws to be updated to take into account those transactions?

Q: Since the insurance industry is heavily regulated in Mauritius, how are those regulations impacting or likely to impact upon disruptive innovation?

DB: It is regulated from the perspective of reporting and submission. But is it regulated in the way it should be regulated to embrace new technologies or new disruptive models? I don't think the current regulatory framework is ready to really accommodate new disruptive models within the existing regulatory framework (1:18:56)

Q: How would you rank the factors impacting disruptive innovation in the insurance industry in Mauritius? (1:19:10)

DB: First is the transparency element. You know when you are online, when you are disruptive, there's no way there is opacity in the way you have to be. You have to be transparent which means that from a pricing perspective, it is not regulated enough for the transparency. (1: 19 : 45)

And the one legislation or one lack of regulatory which is impacting the online business model is the TCF (treating customers fairly). If you haven't got the regulatory framework that promotes or encourages transparency from the market perspective for people, for the consumer to be aware of what is the best practice, what is the best pricing, the best way of customers being treated fairly, the disruptive model is impacted. (1:20:20)

Because our model, I will just give you an example, our model is an online and direct model, what I show onto my online system, on the web as my pricing this is my pricing which does not discriminate in terms of colours of eyes of people and so on. You got to have a framework that promotes transparency in pricing, my model is disintermediated but the guy who is buying an insurance through an intermediary does not know how much this intermediary is earning on top of that pricing . My pricing just says it's that the price for the insurance, if you want someone to buy that insurance and fool you and he charges you on top of Quantum prices, this is between you and him and you know how much it is costing you but right now, I think, for any disruptive model that will face challenges is just how transparent are the regulatory frameworks to adopt what you call the TCF approach. (1:21:30)

One thing that can impact the disruptive model is the recognition of the IT investment. It's is regulatory. And then secondly as I explain to you it's about resource. How local resource, how appropriate or relevant or expertise skills resource are available. And also it is about connectivity, the networking. Connectivity is a big thing. I think they have to obviously open the bandwidth (1:22:55)

Q: So the first ranked you think is the transparency.

Recognising the IT investment. The recognition of the IT investment from a regulatory perspective, because as I explained to you, you get no value for your investment in IT because it does not sit into your asset as a goodwill value that this is your investment as an Intelligence Property and that it has a value to it.

For the human resource is as the third. For human resource, you can still hire it and outsource it to somewhere.

The networking (connectivity) would be the last.

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What are the factors enabling or discouraging disruptive innovation in the insurance industry in Mauritius?

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