Change and Strategic Responses in the Life and Non-Life Swiss Insurance Industry

BACHELOR'S THESIS

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Management Summary

The Swiss insurance industry notifies a trend towards more technology-driven solutions, new regulations, and changing customer expectations. Start-ups, today called InsurTechs, took their chance and entered the market by exploiting opportunities offered by technology. Moreover, the Swiss insurance market reached its peak in terms of gross premiums and profits even showed a decline in the latest years. Consequently, insurers must find strategic responses that address the changes effectively and secure their profitability and existence.

The primary purpose of this thesis was to analyze the key drivers of change in the insurance industry and point out strategic responses. Therein, the focus was to identify the relevant technologies, determine the importance of the value chain activities and identify the market forces that shape the industry.

In the literature review, a theoretical understanding of the technology and InsurTechs has been built. Further, it elucidated Porter’s five forces, which served as a strategic tool for conducting the market analysis. Besides, an insurance-specific value chain was identified to demonstrate practical applicability. Then, a case study of Helvetia was accomplished to have a best-practice approach on how a successful Swiss insurer strategically reacts on the changes. Lastly, experts were interviewed to provide the thesis with more practical insights.

The analysis concluded big data and internet of things being the most critical technologies. Further, both of them are of sustaining nature, but internet of things has the potential to become a disruptor. The analysis showed that the same phenomenon holds for InsurTechs. Additionally, the thesis revealed that most potential of technology implementation could be unfolded in the primary activities of underwriting, sales and claim management and the support activities of IT and human resources. The thesis suggests that insurers must embrace the digitalization. Hence, structural and cultural change is recommended to be able to react quickly to the changing environment. Further, through exploiting digitalization insurers can simplify products, enhance the customer journey and work more accurately and efficiently. By doing so, insurers should trigger innovation through an M&A strategy, cooperations,
incubators and corporate venture fund. This not only ensures innovation, it as well prevents InsurTechs from getting more powerful.

The study concluded that the impact of technology offers insurers to enhance customer interaction, simplify their products, increased efficiency and automation. In contrast, it also includes new competitors in the form of InsurTechs. However, the strategic responses with the market regulations secure future profitability.

The study presents Swiss insurances companies a framework of showing in which direction to go. Further research is suggested on company-specific indications, meaning a thorough analysis of the processes and costs to determine the points where the implementation of technology would be most effective.
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<td>SST</td>
<td>Swiss Solvency Test</td>
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<tr>
<td>FINMA</td>
<td>Swiss Financial Market Supervisory Authority</td>
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<tr>
<td>VAG</td>
<td>Versicherungsaufsichtsgesetz</td>
</tr>
<tr>
<td>AVO</td>
<td>Aufsichtsverordnung</td>
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<tr>
<td>BVG</td>
<td>Berufliche Vorsorge</td>
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<tr>
<td>IT</td>
<td>Information technology</td>
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<tr>
<td>IoT</td>
<td>Internet of Things</td>
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<td>M&amp;A</td>
<td>Merger and Acquisition</td>
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1. Introduction

1.1. Problem Definition

In a recent study, McKinsey & Company claimed that historically insurers had been protected of changes through the regulatory environment, the complexity of products and the massive capitalization (2018, p. 6). This is changing now as Brüggemann, Catlin, Chinczewski, Lorenz and Prymaka (2018, p. 2) state that the change in the insurance industry through digital technologies will occur with certainty, but the timing is still unknown. In the same report of McKinsey & Company, it is argued that traditional insurers can succeed in this momentum of change if acting resolute and quickly (2018, p. 6). This is underlined by EY (2017, p. 16) who claim that:

the inevitable advancement of digital technologies has placed the traditionally slow-moving insurance sector under greater pressure than ever before. Insurers stand to lose if they do not invest more in innovation, learn to experiment more and fail faster.

One of these pressures is arising through the imminent threat of the so-called InsurTech companies. InsurTech companies evolved out of the FinTech start-up scene and provide customers with new services in the insurance industry by using modern technology. In recent years, this sector proliferated due to high investments of venture capitalists. According to McKinsey & Company (2018, p. 9), the investments reached a peak in 2016, where venture capitalists invested a total of 2.6 Billion Dollars. As a result, it will be necessary for insurance companies to embrace the digital transformation in order to be able to compete with the InsurTechs. McKinsey & Company (2018, p. 7) support this statement by arguing that insurance companies that adapt and embrace the new digital world will thrive in the future and the ones that do not embrace it will encounter difficulties to generate attractive revenue.
1.2. Business Relevance

According to BAK Economics (2019) cited in SRF the value added by Swiss insurers overtook the value added by Swiss banks in 2015, which shows the importance of the insurance industry in the Swiss national economy. Nevertheless, the market annotated saturation in gross premiums and industry profits even declined since 2015 from 15.6 billion to 7.6 billion in 2017 (FINMA, 2018). Additionally, Niklowitz (2018) expects a further decline by stating that third-party auto liability insurance, as well as household insurance, will decrease by double-digit percentages shortly. The trend for this comes from the rapidly advancing technologies such as self-driving cars for instance. Further, Niklowitz claims that baby boomers tend to buy fewer goods by making use of digitalization (2018). Hence, market saturation, declining profits and new competitors will lead to fierce competition that forces the insurance companies to adjust quickly and find new growth fields.

1.3. Academic Relevance

According to Lindsay Herbert (2017, p. 1), digital transformation is still a buzzword that appears everywhere, but it still creates anxiety about what it actually is. This is as well true in the insurance industry, where little academic research has been done to understand the impact and execution of digital transformation. Herbert (2017, p. 1) underlines this by claiming that there are many misconceptions about digital transformation and that each defines it differently. This is quite surprising as the topic is of high interest and high impact when having a look at the magnitude of the Swiss insurance industry in the national economy. Furthermore, Eling and Lehmann (2017, p. 1) underline the issue by stating that almost no research has been done on the topic of digital transformation in the insurance sector. Thus, this paper intends to close this research gap and provide the reader with a wider understanding of the digital disruption in the Swiss insurance sector.
2. General Objective and Research Questions

The objective of this bachelor thesis is to identify the impact of technology. Further, it aims at defining the strategic options that arise through the market forces and structure. The purpose here lies in understanding the nature and importance of the technology for Swiss insurers while analyzing the threat imposed by new entrants, the so-called InsurTechs. On top of this, the momentousness of the value chain is used to determine where to appoint strategically the opportunities offered by technology to gain a competitive advantage. Lastly, it is crucial not to lose the scope of additional changes and forces in the market who shape the strategic options for insurers. Hence, the goal of this thesis is to better understand the strategic options for Swiss insurers by taking into consideration the influence of technology under the circumstances of other competitive forces. In order to be able to achieve the goal above, the subsequent main research question has been derived:

- What impact do the new technologies have on the insurance sector and what are the strategic options for the insurance companies in the life and non-life market segments?

2.1. Sub-Aims

In order to be able to answer the aforementioned main research questions, several sub-aims have to be met. Concerning the impact of technology on the Swiss insurance industry, it is of core importance to analyze and reveal the relevant technologies and its nature. InsurTechs are closely linked to evolving technologies. Hence, it is necessary to clarify about the current market positioning of InsurTechs as well as defining their nature. In order to shed light on the opportunities imposed by technology, it needs to be analyzed, which value chain activities have the potential to be improved by technology. Lastly, the market forces will be analyzed to get a holistic understanding of the challenges and opportunities in the market. The goal of this is to get sufficient information about the market and the technology to clarify about the impact of technology and the strategic options for Swiss insurers. Therefore, the following sub-questions have been elaborated to be able to answer the main research question:
- Which technologies are relevant for the insurance industry and what nature do they have?
- What nature do the InsurTechs have?
- Which value chain activities have the potential to be changed by technology?
- What are the challenges and opportunities in the Swiss insurance industry?
3. Definitions

The next chapter aims to clarify several definitions, which are of importance for the paper. It is likely that different definitions exist in the literature. However, the paper is based on the following definitions.

3.1. Financial Service Industry

Up to the 1970s, the financial service industry consisted only of a few banks that offered all products that dealt with money (Financial Services Industry, n.d.). This is underlined by Investopedia who defines the industry as businesses that manage money (Investopedia, 2019). However, after the 1970s the sector started to diverge, as regulations prohibited that banks offered a wide variety of products including insurance products, mutual funds and stocks (Financial Services Industry, n.d.). Although divergence occurred, and business types have been separated, it can still be seen that the sector is somewhat dominated by big conglomerates instead of small or medium-sized companies (Investopedia, 2019). In terms of businesses the industry nowadays includes banks, insurances, credit-card companies and investment funds. This paper exclusively focuses on the insurance business, which is described in the next paragraph.

3.2. Insurance Industry

Investopedia defines insurance as a “contract, represented by a policy, in which an individual or entity receives financial protection or reimbursement against losses from an insurance company” (Investopedia, 2019). Hence, the primary principle of insurance is risk transfer by individuals using the power of the collective as each individual pays a predefined premium to the insurer. The pool of money created by these individuals then serves as a balancing of risks. In other words, as defined by Investopedia “the company pools clients’ risks to make payments more affordable for the insured” (Investopedia, 2019). The insurance industry offers multiple types of insurance policies ranging from home to health (Investopedia, 2019).
Nevertheless, in this paper the life and the non-life insurance excluding health insurances will be analyzed.

3.3. InsurTech Industry

InsurTechs are companies which evolved through the widely known FinTech industry. FinTechs are companies that innovate financial services by bringing in technologies such as Big data for example. InsurTechs are of the same nature. They are as well usually based on advanced technology and aim at providing customers with innovative insurance products or services. In other words, as stated by Braun and Schreiber InsurTechs are “young companies that pursue technology-driven business models” (Braun & Schreiber, 2017).

3.4. Digital Transformation

Nowadays, terms such as “digital transformation”, “digitization” and ”digitalization” are used in an inflationary manner. As a matter of fact, nearly all industries are in the process of the digital age or at least tangent by it. Thereby, many misconceptions exist about the term or process of digital transformation (Herbert, 2017, p. 1). Therefore, the following paragraph aims at identifying the term digital transformation and lay off its meaning for this paper.

According to Lindsay Herbert real digital transformation is “your company’s ability to react and successfully utilize new technologies and procedure – now and in the future” (2017, p. 4). Consequently, digital transformation is not only about giving the customer access to interact online with the company. It is more about changing the company’s structure in a way that the company can react to new technologies. Herbert emphasizes on this, as she states that digital transformation is a process someone only completes once. Therefore, Herbert compares it metaphorically with a boxer and claims that only if a company has the ability to react quickly, as a box champion does, it can win the title. In her book, Herbert goes even further and states that after completing a real digital transformation, the company should have the following characteristics: better profitability, increased efficiency in the operative
business, be closer to the market, improved value to customers and new fields of revenue (2017, p. 5).

As commonly known is the insurance sector compiled by companies that are rather rigid and slow-moving. For many years, the market has been experiencing a high competition but rather slow-moving due to the heavily regulated environment. Thus, insurers stuck to their core business, also known as the traditional insurance business. Currently, the insurance environment is faced by many new technologies as well as a potential threat imposed by InsurTechs. As a result, insurers probably will have to respond quickly and adapt to new technologies and the changing market environment.
4. Research Methodology

The following section aims at describing the methodology and procedure selected for this thesis. In a first step, the research design will be chosen and elucidated, followed by a detailed declaration about the methods and procedures applied.

4.1. Research Design

Amongst the academics, the most commonly used research designs are qualitative and quantitative research. Each design contains many differences in comparison to the other. As a result, each design provides the researcher with different advantages and disadvantages, which are elucidated in the following paragraph.

According to Yin the advantage of qualitative research is “that it enables you to conduct in-depth studies about a broad array of topics, including your favorites, in plain and everyday terms” (2011, p. 6). Mack, Woodsong, MacQueen, Guest and Namey elaborate on this by stating that “the strength of qualitative research is its ability to provide complex textual descriptions of how people experience a given research issue” (2005, p. 1). On the other hand, Creswell points out that quantitative research is “testing objective theories by examining the relationship among variables” (Creswell, 2014).

In the methods applied, the difference between qualitative and quantitative research becomes clearer. Qualitative research distinguishes itself from quantitative research through its flexibility. Thereby, qualitative research pursues methods that are semi-structured and contain open-ended questions (Mack et al., 2005, p. 3). Thus, this allows the researcher to adjust to individual perspectives and pick up further vital aspects that may have not been identified at the beginning. On the opposite, quantitative research follows a very rigid structure with strict procedures and close-ended questions (Mack et al., 2005, p. 3). Consequently, due to this close-ended approach the researcher can better draw relevant comparison as the data gathered is rigidly structured. However, Mack et al. (2005, p. 3) state
that an excellent comprehension about the topic is needed to be able to ask the right questions and assume the scope of possible answers.

As the research aims at finding out the strategic options for insurers a more flexible research design is necessary in order to be able to adjust and value individual perspectives in this very complex theme. Hence, qualitative research has been chosen as research design for this paper. In the following paragraph, the methods of qualitative research will be described and selected according to their fit to the research topic.

4.2. Literature Review

The theoretical framework builds the basis for this paper. Therefore, secondary research in the form of literature review has been selected to collect data. This method is appropriate as it offers the researcher with the most amount of information which will be needed throughout this paper. The literature mentioned above is gathered through the online platforms: Business Source Premier, NEBIS, Orbis, Google and Google Scholar. Additionally, several books have been used to complete the literature review.

First of all, the literature review elucidates strategic tools that are of importance for analyzing the Swiss insurance industry and finding strategic options. This is followed by a review of the literature that identifies technologies that are of importance for insurers. The next part then includes the theory of the innovator’s dilemma that gives the author the necessary model to examine if the technologies are of disruptive or sustaining nature. Lastly, a holistic understanding of the InsurTechs, critical success factors in the insurance industry, as well as the strategic reaction of incumbents is displayed.

4.3. Expert Interviews

According to Mack et al. (2005, p. 2) in qualitative research, the most used methods are participant observation, in-depth interviews and focus groups. While gathering data for the research, each of these methods has its advantages depending on the data that is needed to
answer the research question. Participant observation is employed when the data collected needs to be based on natural behaviors in their ordinary context. On the other hand, in-depth interviews are used when the researcher intends to analyze personal perspectives or experiences. Lastly, focus groups are the method chosen when trying to find data about cultural norms (Mack et al., 2005, p. 2).

In this paper, in-depth interviews have been chosen as the qualitative research method. This is because it enables the author to gather valid information and distinct perspectives of interview experts. For this purpose, employees of insurance companies and specialists are the target group for the interviews. Notably, the author strives for interview partners who have experience in the field of digital transformation, strategy, as well as employees with good knowledge of company-wide processes and customer experience. In the Table 1, all interview partners are listed including their organization, department, function and interview date. The transcriptions of the interviews are added in the appendix.

Table 1 Interview experts

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<td>Lecturer</td>
<td>ZHAW School of Management and Law</td>
<td>Risk &amp; Insurance</td>
<td>2. April 2019</td>
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<tr>
<td>Sibylle Fischer</td>
<td>Strategic Investment Manager</td>
<td>Baloise Versicherungen</td>
<td>Group Strategy &amp; Digital Transformation</td>
<td>3. April 2019</td>
</tr>
<tr>
<td>Sacha Truffer</td>
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<td>3. April 2019</td>
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<tr>
<td>Silvio Hefti</td>
<td>COO Europe</td>
<td>Helvetia Versicherungen</td>
<td>Business Development</td>
<td>16. April 2019</td>
</tr>
</tbody>
</table>
4.3.1. Interview Method and Procedure

The interviews are taking place in the form of a semi-structure. According to Bernard cited in Robert Wood Johnson Foundation (2006), the semi-structured interview is the best option if one does not have the chance to interview the counterpart once again. In this interview type, the interviewer seeks a before well-prepared interview guide. However, during the conduction of the interview, the interviewer can diverge from the guide as the conversation may lead to other important aspects (2006). Therefore, it is assumed that this interview type provides the most suitable option for this research.

The interview guideline is divided into four parts. Namely, the market rivalry, technology, innovators dilemma and the value chain. The first part aims at collecting data in regard to the case study Swiss insurance industry analysis. Secondly, the technology ranking is used to determine the potential of the technology listed in the literature. Thirdly, the innovators dilemma has been elected to gain a practical perspective on the nature of InsurTechs. Lastly, the value chain ranking is used to identify potential changes in the primary and support activities. For the specialist a slightly adjusted interview guideline has been elaborated. Both interview guidelines are attached in the appendix.

4.4. Case Studies

After having completed the literature review, the theoretical foundation will be used to construct a framework which will serve for a case study. As Robert K. Yin (2003, p. 1) states, the case study is an adequate tool to analyze a research question if “the investigator has little control over events and when the focus is on a contemporary phenomenon within some real-life context”. As digital transformation is occurring already now, and the author has no control over it, a case study is assumed to be appropriate for analyzing the topic.

The first case study includes a complete industry analysis of the Swiss life and non-life insurance market. This is essential as in a first step the market structure and its rivalry amongst competitors has to be understood. In order to complete this case study, the author
will use the form of literature, especially articles and statistics provided by financial institutions. Additionally, the case study will apply Porter’s five forces on the Swiss insurance market. Moreover, expert interviews will be conducted to complete the study and get a holistic branch analysis.

The second case study analyzes the Swiss insurance company Helvetia Versicherungen. Helvetia competes amongst the most powerful insurance companies in the life and non-life business in Switzerland. Moreover, the company pursues in its Helvetia 20.20 strategy significant investments in business innovation and digitalization. Thus, due to its high power in the Swiss market and its strategic outset of digital transformation the company is considered adequate for a case study. The case study is structured into two parts. First of all, the history and market positioning of Helvetia will be analyzed to comprehend their strengths and opportunities. Secondly, it is aimed to reveal the strategic options Helvetia follows to stay competitive in the changing market. The necessary data and information for the study will be collected through information’s provided by the company such as annual reports, investors information and general information from the website.
5. Literature Review

In the subsequent chapter several elected theories will be described in more detail. The first part contains Porter’s five forces which builds the theoretical foundation for the Swiss insurance industry analysis. This is followed by the value chain that will be needed later in the expert interviews to identify potential change through technology. Furthermore, theories about technology in the insurance industry and the innovator’s dilemma will be elaborated. By doing so, profound knowledge about the relevant technologies and its nature will be gained. Lastly, the author will elucidate the theories about Insurtechs and the strategic reactions of incumbents. This with the purpose to understand better the InsurTech scene and possible prevention strategies for insurers.

5.1. Porter’s Five Forces

In regard to understanding the market structure, the competitiveness and the industry attractiveness, a holistic branch analysis has to be conducted. For this purpose, the well-known five competitive forces of Michael E. Porter come into play. As stated by Egli (2018, p. 14) “the model is a tool to evaluate strategic options and positions of a given firm within a given industry”. This statement is supported by Johnson, Whittington and Scholes (2011, p. 54) who claim that the five forces are helpful for any strategic analysis even though profit may not be a criterion. Porter (2008, p. 80) states that “the strongest competitive force or forces determine the profitability of an industry and become the most important to strategy formulation. The most salient force, however, is not always obvious”.

In his book, competitive strategy, Porter (1998, p. 4) claims that the attractiveness of an industry is a fundamental factor for determining the profitability of a firm. Thereby the model implicates the principle that the lower the pressure of the five forces, the higher is its attractiveness and profitability (Johnson, Whittington, & Scholes, 2011, p. 54). Furthermore, Porter (2008, p. 81) clarifies that it is neglectable “whether an industry is emerging or mature, high tech or low tech, regulated or unregulated”.
Porter (2008) defines the five forces as followed: “(1) the entry of new competitors, (2) the threat of substitutes, (3) the bargaining power of buyers, (4) the bargaining power of suppliers and (5) rivalry among the existing competitors”. Besides, Porter provides multiple elements for each force to determine the relative force of it (see Figure 1).

The threat of entry of new competitors is determined by the entry barriers to deal with, before being able to do business in the industry (Johnson et al., 2011, p. 61). Consequently, if industry entry barriers are high, it is beneficial for players that have already established themselves in the said industry. The threat of substitutes arises with products that accomplish the same or likewise performance as the industry’s product (Porter, 2008, p. 84). A typical example of such a substitute is the non-diary milk in the milk industry. Accordingly, the attractiveness of the industry decreases as the threat of substitutes increments (Johnson et al., 2011, p. 58). The bargaining power of buyers reflects the ability of buyers to execute pressure on the companies for better quality, lower prices or more services (Porter, 2008, p. 83). As a result, if the power contained by buyers is high, the industry attractiveness and profitability decrease. The bargaining power of suppliers is the reverse side of the before elucidated power of buyers. Therefore, if switching costs are high and suppliers are concentrated the industry attractiveness decreases (Johnson et al., 2011, p. 58-59). Self-explanatory the intensity of rivalry in a specific industry is particularly high if the other four forces favor competition. In more detail, Porter (2008, p. 85) claims that industry rivalry is high and attractiveness low if there are many competitors, low industry growth and high exit barriers.
Grundy (2006, p. 215) argues that the five forces are a very handy tool. Especially, as it down breaks microeconomic theory in simplified five forces and it helps managers to predict the long-term profitability of a particular industry. However, Grundy as well mentioned several criticisms about the model. First of all, Grundy stresses out that the model facilitates too much the importance of the industry value chain. Besides, the author claims that the model neglects the linkage to management action, as managers may have low influence on the five forces (Grundy, 2006, p. 215).

In this paper, the model of five competitive forces is of high importance as it gives an understanding of the insurance market, its structure and the competitive forces. Therefore, the model will build the fundament for the industry analysis. However, due to the
aforementioned reasons, the necessity of completing a value chain analysis will be fulfilled in a further step. This ensures a holistic market analysis approach.

5.2. Value Chain

Porter (1998, p. 36) states that “every firm is a collection of activities that are performed to design, produce, market, deliver and support its product. All these activities can be represented using the value chain”. For every company, the value chain is at the core of any strategic analysis as it defines the value that is created by the company. In terms of the value chain, the value reflects the amount a customer is willing to pay for the created product or service by the company (Porter, 1998, p. 38). Instead of focusing on the cost structure, organizations should rather focus on the target to provide customers with a created value that exceeds the cost incurred (Porter, 1998, p. 38). In addition, the value chain is a tool that helps to find the competitive advantage of a company by analyzing all the activities that are performed by a firm as well as the interaction of them (Porter, 1998, p. 33). That is why the value chain of Porter’s will be used in this paper to understand better how insurances create value and how technology could impact this value creation (see Figure 2).

The model includes two main categories, the primary and support activities, which together build the whole value activities of a company. Porter (1998, p. 38) defines value activities as “the physically and technologically distinct activities a firm performs”. Primary activities combine the physical activities that together build the product, the sale, the transportation and its post-sales service. On the other hand, the support activities are taking over the tasks of supporting the primary activities and each other (Porter, 1998, p. 38).
This model reflects more the value chain of a production or a distribution company instead of a service industry. Therefore, an extended version which depicts a typical insurance value chain introduced by Rahlfs based on Porter and cited in Eling and Lehmann (2017, p. 362) will be used in this paper (see Figure 3).
However, this only illustrates a general insurance value chain to get a grasp of the activities that insurers perform to create value. In regard to the competitive advantage, a firm-specific value chain has to be conducted. Porter (1998, p. 36) states:

An industry- or sector wide value chain is too broad, because it may obscure important sources of competitive advantage. Though firms in the same industry may have similar chains the value chains of competitors often differ.

Everybody across the world talks about technology and its impact on the world, businesses and private life’s. Often it is believed that the implementation of more technology will lead to increased efficiency and a competitive advantage. As a matter of fact, the criteria of technology are insufficient to determine a competitive advantage. However, Porter (1998, p. 166) argues that technology can be important for competition when it influences the competitive advantage of a firm. He elaborates on this by mentioning that in order to understand the impact of technology on the competitive advantage the value chain has to be examined (Porter, 1998, p. 166).

In this paper, the value chain is of high importance as it helps to understand the impact of technology. Therefore, throughout the expert interviews the insurance specific value chain will be used to determine crucial changes.

5.3. Technology

In the following section, the emergent technologies that could have an impact on the value chain will be discussed. In doing so, the technology framework by Eling and Lehmann will be analyzed and compared with insights from expert interviews.

According to Eling and Lehmann (2017) the upcoming or already existing technologies, that are of importance for insurers, can be divided into three main categories (see Figure 4). The first category includes big data and internet of things, which enables insurers to acquire and analyze data (Eling & Lehmann, 2017, p. 5). The second category contains technologies for
data storage such as Blockchain and Cloud computing. The last category includes technologies for communication and sales such as Mobile devices with apps, Robo advisor, Social Network, Video calls, Video platforms and websites (Eling & Lehmann, 2017, p. 5).

Figure 4: List of Technologies based on Eling and Lehmann (Eling and Lehmann, 2018, p. 364-365, own illustration)

The Oxford dictionary (2019) claims that big data are “extremely large data sets that may be analyzed computationally to reveal patterns, trends, and associations, especially relating to human behavior and interactions”. This statement is challenged by Eling and Lehmann (2017, p. 5) who state that big data is the “analysis of large (partly unstructured) data with the goal of improved decision making”. In this paper, the latter definition will be used, as it seems more appropriate in the context of insurance, as their main target is to gain additional information through big data. The next term, Internet of Things, is referring to a “connected world; every element sends and receives information through sensors” (Eling & Lehmann, 2017, p. 5). Consequently, the technology is often related to smart products, where devices exchange information.

Concerning the second category, the Oxford dictionary (2019) describes Blockchain as “a system in which record of transactions made in bitcoin or another cryptocurrency are maintained across several computers that are linked in a peer-to-peer network”. Regarding this definition, Blockchain can be defined as a decentralized accounting system. However,
the technology as well can be used for other data transactions. Therefore, Crosby et al. cited in Eling and Lehmann (2017, p. 5) define it as a “decentralized database of all digital transactions among participants”. The other technology, which is perceived to have an impact on the insurance value chain, is Cloud computing. This type of technology is nowadays generally-known and widely used. It allows enterprises or private consumers to have their data on remote servers. Eling and Lehmann (2017, p. 5) describe it similarly as “files stored online and thus accessible everywhere and anytime”. Therefore, companies have the opportunity to use remote storage instead of maintaining plenty of local servers. As a consequence, companies can access more security, remote accessibility and improved cost-efficiency through the ability to scale up or down in a short time frame.

The last category contains technologies that are already well-known and extensively used by Swiss corporations. Considering mobile devices with apps, the Oxford dictionary (Oxford Dictionaries, 2019) claims it as “a portable computing device such as a smartphone or tablet computer”. This is confirmed by Eling and Lehmann (2017, p. 6) who define mobile devices as well as smartphones and tablets. Besides, they emphasize the replacement of desktop computers through mobile devices with apps (Eling & Lehmann, 2017, p. 6). Robo advisor is “a software that uses artificial intelligence to advice customers” (Eling & Lehmann, 2017, p. 6). This is supported by the Oxford dictionary (Oxford Dictionaries, 2019) that highlights the automated guidance by robo advisors. The next presented technology in their paper is social network, messenger and internet forum. Companies such as Facebook, Whatsapp, Snapchat, Twitter evolved by using these technologies. Although the technologies have different user surfaces, its main purpose is the same. It allows “private persons and organizations to share information” (Eling & Lehmann, 2017, p. 6). Video calls such as Facetime or Skype provide the possibility to visualize phone calls and enables users to interact on a personal basis (Eling & Lehmann, 2017, p. 6). Video platforms are platforms where videos of distinct topics are shared online (Eling & Lehmann, 2017, p. 6). The last technology mentioned is a website. Concerning the definition of the Oxford dictionary (2019) a website is “a set of related web pages located under a single domain name”.

5.4. Innovators Dilemma

In his book about the innovator’s dilemma, Christensen describes why successful firms with good management talent and skills still can fail and be driven out of the market by disruptors. In this paper, the model will help to define the nature of technologies and InsurTechs.

In order to understand the failure framework in his book, he claims that there is the need to understand the strategic distinction between sustaining and disruptive technologies (Christensen, 1997, p. 10). This distinction is of core importance for the paper as it determines the strategic options for insurers on how to confront the InsurTech companies. Sustaining technologies are new technologies that increment the product performance of existing products (Christensen, 1997, p. 10). On the other hand, disruptive technologies are aiming at a completely different value proposition than existing products (ibid.). Additionally, Christensen states that disruptive technologies often are characterized by worse product performance in the beginning (Christensen, 1997, p. 10).

The theory of disruptive innovations is extended by trajectories in the context of performance and time. As illustrated in Figure 5, sustaining technologies products often overperform the performance demanded by the market. In contrary, as described before, products of disruptive technology start lower than the performance demanded by the low-end of the market. Christensen (1997, p. 12) adds that disruptive technologies are at the very beginning, usually characterized by low margins. Thus, products of this nature are usually first introduced in emerging, or insignificant markets as the high-end customers in the beginning cannot use the products (Christensen, 1997, p. 12).
King and Baatartogtokh (2015, p. 12) elaborate on the failure framework of Christensen and divide it into four key elements, as illustrated in Figure 6. The first element depicts that each industry has its innovation trajectory. As stated by Christensen and Raynor cited in King and Baatartogtokh (2015, p. 79) “good managers strive to make better products that they can sell for higher profit margins to not-yet-satisfied customers in more demanding tiers of the market. The second point describes that sustaining innovation driven by incumbents often overshoots the needs of mainstream customers. As a result, many customers do not have the possibility to actually use the product improvements. The third element explains that incumbents often have the necessary capabilities to respond to disruptors but fail in exploiting them. This is because incumbents usually have assigned resources and implemented processes in a way that encourages the development of sustaining technologies (King & Baatartogtokh, 2015, p. 79). In the same research paper, it is elucidated that disruptors target at new low-end customers in order to avoid competition with incumbents. The last element shows the moment of disruption and the flounder of incumbents (King & Baatartogtokh, 2015, p. 80).
Moreover, King & Baatartogtokh elaborate on the weaknesses of the model as they tested in their article the disruptive theory in 77 cases. Although the model seems very promising, only nine percent of all cases matched all four elements of the disruptive theory (King & Baatartogtokh, 2015, p. 83). This high mismatch rate occurred because the theory neglects legacy costs, changing scale economies and the law of probability (King & Baatartogtokh, 2015, p. 84). However, in none of these cases, a company doing business in the insurance sector has been evaluated. Therefore, it is uncertain how concluding the weaknesses in the article are for this paper. Despite the criticism mentioned, the authors still suggest to use the disruptive theory, but they point out that managers should not only see it from a single perspective but rather analyze it from multiple ones (King & Baatartogtokh, 2015, p. 85). This statement is supported by Braun and Schreiber, who claim that disruption is not equivalent to success (2017, p. 88).

5.5. InsurTech Landscape

The following part aims at giving an insight into the InsurTech scene. First of all, the Insurtech matrix by Braun and Schreiber will be elucidated, followed by the strategic reaction of incumbents.
5.5.1. InsurTech Matrix

The InsurTech landscape is very diverse, with startups offering different products by using different technologies. That is why Braun and Schreiber elaborated an InsurTech matrix to understand the nature of the InsurTechs. In their matrix, Braun and Schreiber (2017, p. 90) link the technologies of the InsurTechs with another critical factor, the available capital (see Figure 7). For illustrative purpose, one InsurTech example is added to each type.

In contrast to Christensen, who defines only two types of technology in his literature, sustaining and disruptive technology, Braun and Schreiber added the enablers to this matrix. According to them, enablers are InsurTechs that aim at helping the insurance industry with their technological innovation (Braun & Schreiber, 2017, p. 91). Or in other words, enabling innovations are the innovations that could help insurers to modernize their business by using Internet of Things, big data and blockchain (Braun & Schreiber, 2017, p. 87). For instance, big data could be used to improve the underwriting’s accuracy and Internet of Things to track risks better.
5.5.1.1. Strategic Reaction of Incumbents

Braun and Schreiber provide in their book strategic recommendations on how incumbents could react to the InsurTech companies. As it can be seen in the matrix, lightweights are InsurTechs characterized by sustaining technology and limited capital available. Braun and Schreiber (2017, p. 92) state that for this kind of InsurTechs, no current strategic response from insurers is needed. However, they underline that insurers should keep an eye on them and frequently screen their progress, as they may are capable of developing breakthroughs at any time (Braun & Schreiber, 2017, p. 92).

The next type described is the usual suspects. Usual suspects as well are InsurTechs of sustaining nature, but in contrast to the lightweights, they have ample capital. Due to the ample capital, such corporations are considered as having the chance to thrive in the marketplace if neglected by incumbents. That is why it is necessary for insurers to compete with them and attack them aggressively before they jeopardize the market share of insurance companies (Braun & Schreiber, 2017, p. 92).

The third type is the threats. Threats are InsurTechs that have a disruptive technology but are limited in the capital. Hence, insurers should invest in them, as in this way, they can promote innovation outside of their balance sheet (Braun & Schreiber, 2017, p. 95). Additionally, Braun and Schreiber (2017, p. 95) state that it is not of importance if incumbents invest through own venture capital funds, incubator or accelerator programs.

The following described type are the disrupters. Disrupters are in the trajectory of disruptive innovation as elucidated by Christensen. The remarkable difference to threats is that disrupters already have ample capital. Therefore, they usually cannot be considered in an investment strategy in contrast to the threats (Braun & Schreiber, 2017, p. 96). Nevertheless, Braun and Schreiber (2017, p. 96) emphasis that incumbents should strengthen their core capabilities.
Lastly, insurers should cooperate with InsurTechs in the enabling dimension (Braun & Schreiber, 2017, p. 96). The significant advantages of such cooperations are the learning of technology without being exposed to significant risk and improving the customer experience.
6. Case Study Swiss Insurance Industry Analysis

In the following section, a case studied will be executed. The case study aims at analyzing the forces driving the Swiss insurance market by applying Porter’s five forces.

6.1. Introduction

The following section introduces the Swiss insurance market. It is aimed to reveal the market structure, identify the development of the business sectors and analyze the industry profitability.

6.1.1. Market Structure

The Swiss insurance market contains in total 204 insurance companies (FINMA, 2018, p. 4). Thereof only 19 companies are life insurers. On the other hand, 118 companies are dedicated to the non-life insurance business. Most of them are domiciled in Switzerland. However, the penetration of foreign insurers is higher in the non-life sector (FINMA, 2018, p. 4). The companies generated in total gross premiums of over 130 billion Swiss Francs (FINMA, 2018, p. 5). Thereof over 31 billion gross premiums are earned in the life sector and over 27 billion in the non-life sector (FINMA, 2018, p. 11).

In the life sector, the six most powerful insurances dominate the market by having together a market share of 86 percent in 2017 (FINMA, 2018, p. 15). The same structure can be observed in the non-life sector, where eight insurers have 83.3 percent of the market share (FINMA, 2018, p. 23). Hence the life and non-life insurance market structure can be described as oligopolistic.

6.1.2. Industry Growth

As illustrated in Figure 8, it can be seen that the industry stagnated or even declined over the past years. Especially, the life insurance sector annotated a decrease over the last four years.
On the other, the non-life sector experienced a steady but very slow incrementation over the last decade. Thus, the market is mostly saturated, and companies battle a lot for increasing their market share. This statement is supported by Ernst and Young (EY), who claim that the market has reached its saturation and insurers are setting too optimistic goals in terms of their growth projection (Ernst and Young, 2016). In the same journal article, EY describes that demand tends to decrease due to the strong Swiss Franc, the decline in wealth, the stagnating immigration, the political uncertainty about the pension regulations and the already high financial expenses of Swiss people for insurances. The strong currency, the decline in wealth and reduced immigration contribute badly to the Swiss economy and therefore, are an intrinsic driver of the declining demand. Differently is the last criterion, which is more proactive and enabled by digital technologies. As consumers notice that their financial contributions are already making up a big piece of their annual income, they try to reduce this expense. By using digital solutions, the market prices will become increasingly transparent, of which consumers will make use to reduce the prices. For the above-mentioned reasons, Ernst and Young states that it is very likely that a competition battle will drive 45 percent of insurances out of the market (Ernst and Young, 2016).

![Swiss Premium Growth](image)

*Figure 8 Swiss Premium Growth (FINMA, Insurance market reports 2009-2017, own illustration)*
6.1.3. Business Sectors Development in Switzerland

By comparing the years in Table 2, it can be seen that almost all companies suffered a small decrease in premiums in the life business. Only Basler Leben and Zürich Leben managed to gain a little augmentation in premiums. This is mainly due to their reserved underwriting policy, as stated in the article of FINMA (2018, p. 15). Additionally, it is mentioned that the life insurance sector encountered some rough challenges due to the low-interest rate environment, which impedes the business (FINMA, 2018, p. 10). This statement is underlined by Grass and Rufer (2013, p. 5) who describe the low-interest environment faced by insurers as one of the major challenges. In the same report, it is as well stated that another challenge is encountered through demographic change, as people tend to live longer (Grass & Rufer, 2013, p. 5).

Table 2 Insurance market report 2017 (Eidgenössische Finanzmarktaufsicht (FINMA), 2018, p. 15)

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<tbody>
<tr>
<td>Swiss Life</td>
<td>9,042,619</td>
<td>29.5%</td>
<td>9,583,329</td>
<td>31.3%</td>
</tr>
<tr>
<td>AXA Life Ltd</td>
<td>7,593,969</td>
<td>24.8%</td>
<td>7,992,512</td>
<td>26.1%</td>
</tr>
<tr>
<td>Helveta Swiss Life Insurance Company Ltd</td>
<td>3,511,660</td>
<td>11.5%</td>
<td>3,661,251</td>
<td>11.9%</td>
</tr>
<tr>
<td>Balose Life Ltd</td>
<td>3,014,463</td>
<td>9.8%</td>
<td>2,989,986</td>
<td>9.8%</td>
</tr>
<tr>
<td>Allianz Swiss Life Insurance Company Ltd</td>
<td>1,743,127</td>
<td>5.7%</td>
<td>1,758,771</td>
<td>5.7%</td>
</tr>
<tr>
<td>Zurich Life Insurance Company Ltd</td>
<td>1,443,127</td>
<td>4.7%</td>
<td>1,425,968</td>
<td>4.7%</td>
</tr>
<tr>
<td>Six largest insurers</td>
<td>26,348,995</td>
<td>86.6%</td>
<td>27,411,817</td>
<td>89.5%</td>
</tr>
</tbody>
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The non-life sector has been remarked by stagnation and only a small increase in premiums (see Table 3). This is because in the accident, fire and property damage insurance a high price competition is ongoing (FINMA, 2018, p. 23). Additionally, a decline in the third-part auto liability insurance has been captured because fewer cars have been bought and enrolled (FINMA, 2018, p. 23). According to Grass and Rufer, the non-life insurance sector is characterized by an intense competition and insurers will be required to build upon their product innovation strength in order to stay successful (Grass & Rufer, 2013, p. 5).
Table 3 Insurance market report 2017 (FINMA, 2018, p. 23)

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<tbody>
<tr>
<td>AXA Insurance Ltd</td>
<td>3,308,045</td>
<td>18.5%</td>
<td>3,271,711</td>
<td>18.5%</td>
</tr>
<tr>
<td>Swiss Mobiliar Insurance Company Ltd</td>
<td>2,781,660</td>
<td>15.6%</td>
<td>2,698,677</td>
<td>15.3%</td>
</tr>
<tr>
<td>Zurich Insurance Company Ltd</td>
<td>2,460,644</td>
<td>13.8%</td>
<td>2,530,051</td>
<td>14.3%</td>
</tr>
<tr>
<td>Allianz Suisse Insurance Company Ltd</td>
<td>1,848,404</td>
<td>10.4%</td>
<td>1,810,305</td>
<td>10.3%</td>
</tr>
<tr>
<td>Helvetia Insurance Company Ltd</td>
<td>1,501,756</td>
<td>8.4%</td>
<td>1,491,238</td>
<td>8.5%</td>
</tr>
<tr>
<td>Baloise Insurance Company Ltd</td>
<td>1,309,928</td>
<td>7.3%</td>
<td>1,289,753</td>
<td>7.3%</td>
</tr>
<tr>
<td>Vaudoise Insurance Company Ltd</td>
<td>867,910</td>
<td>4.9%</td>
<td>869,011</td>
<td>4.9%</td>
</tr>
<tr>
<td>Generali Insurance Company Ltd</td>
<td>785,876</td>
<td>4.4%</td>
<td>790,437</td>
<td>4.5%</td>
</tr>
<tr>
<td>Eight largest insurance companies</td>
<td>14,864,223</td>
<td>83.3%</td>
<td>14,751,183</td>
<td>83.6%</td>
</tr>
</tbody>
</table>

6.1.4. Profitability

After having had very profitable years, the industry annotated a decline. More specifically, in 2017, the decrease in annual profits amounted 3.4 billion Swiss Francs (see Figure 9). According to FINMA, this occurred as reinsurers and non-life insurers have been affected profoundly by the natural catastrophes in the US as well as the Caribbean (2018, p. 5). In contrast, the life insurers gained an augmentation in the profitability of about 336 million Swiss Francs. Notably as well is that the equity capital in the total market only shrank by 3.6 percent (FINMA, 2018, p. 5). In general, it can be said that although the market profitability declined, Switzerland is still a very good and stable market because of the fact that the premium trends show no fall (FINMA, 2018, p. 22). This is underlined by Pugnetti (2019) who states that “Switzerland is a very stable and very rich market with a high margin”.

30
6.1.5. Regulatory Environment

Another very essential aspect of the insurance industry is the regulatory environment. The regulatory environment is essential for two reasons. First, due to the complexity of products, the policyholders need protection and secondly, its relevance to the national economy (Zinnöcker, 2017, p. 46). The regulatory responsibility is taken over by three governmental entities: Versicherungsaufsichtsgesetz (VAG), Aufsichtsverordnung (AVO), Eidgenössische Finanzmarktaufsicht (FINMA). By that, the framework conditions are determined by the VAG and AVO. On the other hand, the FINMA takes ownership of the custody (Zinnöcker, 2017, p. 46).

In order to be able to operate an insurance business in Switzerland the VAG stipulates that every company needs to have a license granted by the FINMA (Versicherungsaufsichtsgesetz (VAG), 2019). Not affected by the license of FINMA are foreign insurers that have EU license. The EU license was introduced in 1994 and allows insurers to operate across the EU with a single EU license (Schanz, 1996). However, to get a license by FINMA the company that applies needs to hand in a handful of documents as described in detail in the VAG. By doing so, the FINMA checks the company for minimum capital available, equity capital and

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Figure 9 Annual profits total market (FINMA, 2018, p. 6)
object of the company (Versicherungsaufsichtsgesetz (VAG), 2019). All criteria aim at ensuring the interest of insured people. The first two criteria thereby secure that insurers have sufficient capital available to cope with payment obligations. The last criterion defines that insurers do not compete in any other businesses than related to insurance (Versicherungsaufsichtsgesetz (VAG), 2019).

Additionally, licensed Swiss insurance companies need to comply with the SST year by year. This test was the first time introduced in 2011 by the FINMA. It aims to assure that insurers are capable of coping with the arising payment obligations also if a worst-case scenario would occur (FINMA, 2018). In this manner, the FINMA secures the purpose of the insurances as collectivistic protection among the individuals. However, the SST as well faced severe criticism. As stated by Werner Enz (2018) the SST is much stricter than the EU solvency test and particularly life insurers encounter difficulties. This is supported in another journal article by Enz (2018) where he claims that the CEO of Axa Antimo Perreta as well as the CEO of Swiss Life Patrick Frost expressed their negative thoughts about the SST. Thereby, they stated that in the BVG for each year and client, the revenue from capital employed is 500 CHF to 1000 CHF lower than it would be with the EU solvency test (Enz, 2018).

6.2. Entry Barriers

6.2.1. Government Policy and Capital Requirements

As elucidated in 6.1.5. Regulatory Environment, the insurance market is faced with many government policies, especially in the context of licensing and capital requirements. Particularly, the control over capital has become stricter with the introduction of the SST in 2011. The policies implemented by the government are in place to ensure that consumers are well protected by insurers even in a worst-case scenario. Therefore, all companies doing business in Switzerland have to follow these rules. Almost all interview experts mentioned during the interview that the market is heavily regulated and emphasized on the regulatory burden (Fischer, 2019; Truffer, 2019; Hefti, 2019). In contrast, they further claimed that
policies do not only impede business but rather protect insurers from new entrants such as InsurTechs for example (Fischer, 2019 & Truffer, 2019 & Hefti, 2019).

6.2.2. Economies of Scale

According to Cummins and Rubio-Misas (2001, p. 7) economies of scale occurs when “average costs per unit of output decline as the volume of output increases”. Biener, Eling and Wirfs (2016, p. 705) describe this phenomenon in the insurance industry with three primary sources. Firstly, it is stated that fixed production costs can be disseminated, for instance, in the IT infrastructure. Secondly, “learning effects gained by managers operating at larger scale” is expected to have a positive effect on the economies of scale (Biener et al., 2016, p. 705). Thirdly, it is claimed that especially in the insurance industry, economies of scale can be gained through a reduction in income volatility (Biener et al., p. 705). In other words, insurers can gain a significant advantage through diversifying their risk and hence, can be more effective in underwriting risks. However, in literature, the real correlation between a firm’s size and its efficiency have been heavily discussed. As shown in the analysis of Rai, large companies in Switzerland display no efficiency gains over their smaller competitors (Rai, 1996). On the other hand, Biener, Eling and Wirfs state that there is a positive correlation between the size of a company and its efficiency (Biener et al., p. 705). Although big firms experienced a slowdown in productivity, smaller firms still were not capable of catching up because of the challenges faced in the life insurance sector, such as low-interest rates and high competition. In addition, it is highlighted that diversifying its business internationally and increasing the size of firm has a positive effect on productivity (Biener et al., p. 705). In conclusion, opinions about the positive effects of economies of scale diverge. However, it is assumed that due to its bigness, companies can underwrite more risk and therefore be stronger in its market presence. This is supported by Hefti (2019) who states that a company needs to scale to be able to carry more risk and go into the price competition.
6.2.3. Switching Costs

The importance of switching costs and its influence has been heavily discussed. Marcos (2018, p. 8) analyzes the switching costs in the insurance industry and defines it as the “costs that customers have to incur when switching service provider”. These costs can be divided into the dimension of positive and negative switching costs. In the same paper, Marcos describes the positive switching costs as the social and lost benefits (2018, p. 10). To be more precise, positive switching costs are benefits that customers would have to drop if they change the supplier. On the other hand, negative switching costs are perceived as procedural costs (Marcos, 2018, p. 10). Every insurance contract varies in its subject terms. That is why to make a consensus of the negative switching costs is difficult. For instance, every contract has different cancelation periods, which can be perceived as procedural costs. Therefore, Marcos (2018, p. 12) determines that because of the less controlled insurance legislation, negative costs lost their importance in insurance. On the downside, a positive correlation between positive switching costs and customers satisfaction, loyalty and word of mouth spreading have been found (Marcos, 2018, p. 20). It is highlighted that financial incentives thereby make the highest contribution in terms of switching costs (Marcos, 2018, p. 21). Nevertheless, as positive switching costs do vary amongst all competitors and products, it is difficult to determine the switching costs of the whole industry. In summary, it can be said that insurers should aim at decreasing procedural costs but focus stronger on positive switching costs. In the Swiss insurance industry, both costs are perceived as being low.

6.3. Determinants of Substitution Threat

6.3.1. Availability of Substitutes

Nearly all interviewed experts agreed that in the most fundamental way, there is no substitute for insurance on the market available (Pugnetti, 2019; Hefti, 2019; Fischer, 2019). Pugnetti (2019) specifies that insurance is risk transfer. He elaborates on it by stating that in the context of risk transfer, there is no other product on the market than insurance products. However, he claims that one could use his resources to invest in an asset portfolio (Pugnetti,
Fischer (2019) added that consumers could switch to hedging. In contrast to insurance, these products are only accessible to businesses and thus, no valid option for private customers (Fischer, 2019).

On the other hand, Truffer (2019) contradicts and argues that there are ways to substitute insurance. For instance, he claims that in rare cases, there exist communities that use self-insurance to cover certain risks. Another substitute is warranties or products that already include insurance coverage. For example, if one buys glasses at Fielmann, it already has coverage against the loss or breach of the glasses (Truffer, 2019). Hefti (2019) argues similarly by stating that with the sharing economy, people will tend to buy fewer products and instead rent them. Consequently, the insurance coverage will already be included in the product when rented. The implication for insurers is that they lose the point of sales (Hefti, 2019). This is supported by Truffer (2019), who claims that as a consumer, one does not know who is behind the insurance coverage provided by Fielmann. Additionally, he highlights the importance as well for insurers to get to the point of sales (Truffer, 2019).

6.4. Determinants of Supplier Power

6.4.1. Supplier Concentration and Switching Costs

With 28 reinsurances doing business in Switzerland in 2017, the market is considered as rather concentrated. This is underlined by Hefti (2019), who claims that reinsurers dictate the market price. He emphasizes that if claims rise, reinsurers make use of their bargaining power and increase the price accordingly (Hefti, 2019). Moreover, IT suppliers are of core importance for insurers. According to Pugnetti (2019) and Hefti (2019) IT suppliers are getting more powerful. Hefti (2019) states that by outsourcing IT, you create a dependence on your IT suppliers, which usually is very costly. He further emphasizes that afterwards, it is hardly feasible to change components of IT suppliers as they have the know how to secure the development (Hefti, 2019). Pugnetti (2019) expands by saying that while you give out IT, you lose the in-house expertise and give more bargaining power to the IT suppliers.
6.4.2. Entrance of Suppliers in Core Business

As stated by Pugnetti (2019), it occurs that reinsurers overjump the primary insurers. However, he highlights that reinsurers do not want to do claims management. Despite having the skills and knowledge to set up quite difficult contracts process big claims, they are not capable of managing many small claims as primary insurers have to do it (Pugnetti, 2019). Another possible entrant of supplier could be the IT suppliers as they are familiar with the business and have expertise in the IT infrastructure and components which are at the core of the business. However, as claimed by Pugnetti (2019) due to the heavy regulation, IT suppliers are hardly able to conduct business independently.

6.5. Determinants of Buyer Power

The power of buyers is minimal but has experienced growth with the evolution of platforms such as Comparis. Comparis allows consumers to compare prices amongst competitors in a short amount of time and without any incurring costs. However, its power is still very limited, as Comparis is strong in creating transparency in prices of health insurance or car insurance (Truffer, 2019). In other sectors such as life insurance for example, are the products just too complex that a consumer would be able to get a good comparison. Additionally, as completing a life insurance is an important decision, consumers most likely do not get the desired trust from an online platform and prefer to contact a broker or advisor from an insurance company itself. This is underlined by Truffer (2019), who states that trust and confidence must be the most essential attribute of an insurance company as it defines the core business. In the same manner, Pugnetti (2019) describes that nowadays, consumers are better educated and check more online. As a result, the consumer trend shows a tendency to more empowerment (Pugnetti, 2019).

6.6. Rivalry Determinants

The rivalry intensity in the Swiss insurance industry is medium to high and rapidly increasing as it can be derived from the above-conducted analysis. The profits in the market also
represent this. As analyzed before the industry almost halved its profits between 2015 and 2017, pressuring insurers to compete better than their competitors. Another critical factor, as elucidated in the chapter 6.1.2 Industry growth, is expressed by the stagnating or even declining market. This imposes a challenge for insurers to achieve their desired growth rates, especially, as a further increase is not expected. Moreover, the business environment encounters difficulties due to the low-interest environment and demographic changes that affect the life business particularly. In addition, there are some suppliers, notably reinsurance and IT companies, that can exercise power upon on insurances to a certain extent. Yet the pressure is of a cost nature and does not threaten the core business as an entrance is rather unlikely due to the fact that reinsurance companies do not have the knowledge of processing claims and IT companies face the heavily regulated environment.

Yet there are still many factors in favor of doing business in the insurance sector. The most important factor is enforced by the government, which heavily regulates and supervises the insurance market in terms of entrance, business models and capital requirements resulting in high entry barriers. Additionally, as the research conducted shows, almost no substitutes for risk transfer are available today. This is particularly true when considering private consumers. For them, the only option to elude insurance companies is to join so-called self-insurance communities. Though, as resulted in the interviews, some change can be expected through the growing sharing economy. Although this change would force insurers to adjust their business models, the basic principle of risk transfer and hence, insurance companies still would be needed. The buyer power as well is to the benefit of insurers as their power is low. Digital Platforms enhanced the price and product transparency for consumers but is still very limited due to the high complexity of certain products.
Figure 10 Five forces in the Swiss insurance industry (own illustration based on Porter, 1998)
7. Case Study Helvetia

The following case study aims at analyzing the Swiss direct insurer Helvetia. In this manner, it is aimed to reveal future strategic options for Swiss insurers. Therefore, after introducing the history and market position of Helvetia, its corporate strategy will be analyzed in detail.

7.1. History

Helvetia was founded in 1858 in St. Gallen under the name “Allgemeine Versicherungs-Gesellschaft Helvetia” (Reinhild, 2018). Initially, the company offered only transport insurance products. After a severe incendiary in Glarus, the company added a separate entity the so-called “Helvetia Feuer” that insured fire coverage. In the following years, Helvetia diversified its business by adding several separate entities and expanding in other country markets. In 1996, another milestone was achieved by going into a strategic alliance with the traditional insurer Patria, Helvetia transformed into a complete all-line insurer (Reinhild, 2018). Nowadays, the company is proud of being one of the strongest traditional insurers in the Swiss market with an IFRS result of 431 million Swiss Francs (Helvetia Group, 2019).

7.2. Market Position

With a total business volume amounting over nine billion Swiss Francs in the year of 2018, Helvetia counts to the most powerful insurance companies in the Swiss market (Helvetia Group, 2019). Helvetia thereby generated revenue by conducting business in the life, non-life and reinsurance sector. Thereof, 56 percent are earned in Switzerland, 33 percent in Europe and 11 percent in specialty markets such as Singapore for example (Helvetia Group, 2019). Although the company could annotate an increase in revenue in all business areas, they experienced a fall in profitability due to the weak equity markets and bond amortizations (Helvetia Group, 2019, p. 52). However, Helvetia still managed to lower its combined ratio to 91 percent in the non-life business, which highlights the portfolio strength of the company (Helvetia Group, 2019, p. 53). This strong performance is confirmed when it is compared
with the industry average combined ratio amounting to 94.9 percent in 2017 (FINMA, 2018, p. 18).

7.3. Strategy 20.20

In the strategy 20.20, Helvetia defines its strategic targets for 2020. Thereby, the company identifies three key drivers of change in the insurance industry; digitization, regulations and new competitors (Helvetia Strategy 20.20, 2017, p. 7). This is complemented by the annotated trend of customer behavior (Helvetia Strategy 20.20, 2017, p. 6). According to Helvetia, the customers are “informed, hybrid, interconnected and mobile with more individual demands (Helvetia Strategy 20.20, 2017, p. 6). Instead of a prevention strategy to elude these challenges or trends, the company’s strategic aim is the opposite way, as they target at exploiting these changes beneficially for the company (Helvetia Strategy 20.20, 2017, p. 6). In the following section, the three pillars of change will be broken down into their primary objectives.

7.3.1. Digitization

The digitization strategy of Helvetia is divided into three main aspects: online business models, smart data & analytics and automation (Helvetia Strategy 20.20, 2017, p. 8). With the online business models, Helvetia aims at offering an omnichannel interaction to their clients. This intention complements the core value of Helvetia by serving customers in an easy and convenient manner. In addition, the company seeks a structural change for being more open to incorporate external partners. Secondly, smart data & analytics is a central part of the strategy because it allows the company to increase personalization. Particularly, it is aimed to respond to the trend of individualism by offering customized products and services. Thirdly, with the automation as a main focus (Helvetia Strategy 20.20, 2017) of the digitization strategy the company wants to automate processes in order to be more efficient and faster in the service provision (Helvetia Strategy 20.20, 2017, p. 8)
7.3.2. Regulations

In the strategy 20.20, it is mentioned that stricter regulations and the low-interest environment hinder the business (Helvetia Strategy 20.20, 2017, p. 7). Helvetia faces this challenge by repositioning the life business. Thereby, the aim is to further promote capital efficient life products and modern guarantee concepts in order to cope with the new impediments. These capital efficient products then help to overcome the low-interest environment and secure the yields in the long-term. Further, the asset liability management will be continued in a conservative manner to cope efficiently with the capital requirements imposed by the SST (Helvetia Strategy 20.20, 2017, p. 7).

7.3.3. New Competitors

The ongoing change in the market comes with new competitors. As a strategic response, the company implemented several strategic reactions as illustrated in Figure 11 in order to find ways to constantly reinvent the current business models (Helvetia Strategy 20.20, 2017, p. 10). At the core of the transformation, the company defines the following three key elements: organic growth, customer journey & convenience and efficiency (Helvetia Strategy 20.20, 2017, p. 10).

First of all, the company uses its good capital position to pursue an active M&A strategy (Helvetia Strategy 20.20, 2017, p. 10). One of their newest acquisition is Moneypark. Helvetia acquired a major stake in the start-up for the purpose of having new customer touchpoints and enhanced interaction (FINEWS, 2016). The business model of Moneypark focuses on online mortgage banking by deploying new technologies such as Robo advisors and digitalized customer channels (FINEWS, 2016). As stated by Enz (2018), this acquisition builds a strong fundament in the ecosystem “Home”. CEO Helvetia, Philipp Gmür, elaborates on this by stating that Moneypark is a chance to learn about digitalization and enables to transfer the know-how into the insurance business (FINEWS, 2018).
Secondly, a further pillar of the innovation management is built through the corporate incubation. The program was brought to life as a think tank consisting of Helvetia employees (Torcasso, 2017). The execution takes place in the form of a workshop, where the employees try to find new business models by deploying design thinking (Torcasso, 2017).

Thirdly, the company seeks further cooperations or opportunities of corporate venturing. The acquisition of the National Suisse in 2015 incorporated the transition of the cooperation of Smile.Direct (smile.direct, n.d.). Smile.Direct is an online insurer that offers primary insurance products. By doing so, the company focuses on simple, fair and direct products which fits perfectly to the Helvetia slogan “simple. clear. Helvetia.”. To further trigger such corporations, a fund of 55 million has been raised (Helvetia, n.d.). The intention of this fund is to invest in start-ups that are doing business in the traditional insurance or in a related field that can be connected with the business of Helvetia. Moreover, it is mentioned that the venture fund exclusively invests in start-ups that already are beyond the seed phase (Helvetia, n.d.).

![Figure 11 Strategy helvetia 20.20 (Helvetia, 2017, p. 10)](image)

Figure 11 Strategy helvetia 20.20 (Helvetia, 2017, p. 10)
8. Research Results

8.1. Interview Results

The following section reveals the answers from the interview respondents. The part is divided into three parts: innovators dilemma, technology and value chain.

8.1.1. Interview Innovator’s Dilemma

In this section, the answers from the experts concerning the innovator’s dilemma will be analyzed in detail. Thereby a focus was put on understanding the nature of InsurTechs and its current threat imposed on incumbents.

All interview experts agreed that the current InsurTechs are not of disruptive nature as they are not able to replace the traditional insurers. Nevertheless, Truffer (2019) and Hefti (2019) believe that start-ups are threatening the client intersection. Differently argues Fischer (2019) who states that disruption is not arising from InsurTechs but rather from other technologies such as autonomous driving cars. A reason for the non-disruptive potential could be the 20-year life cycle of the Swiss insurance industry (Pugnetti, 2019). Consequently, change is happening very slowly, which as well has to do with the acceptance of the people towards new technologies. Additionally, the products and processes are characterized by high complexity, and in order to be able to underwrite risk, one needs to have a certain scale and capitalization (Hefti, 2019). These entry barriers make it even more difficult for InsurTechs to disrupt the market.

8.1.2. Interview Ranking

The following section aims at revealing the interview results. Therefore, the answers of the respondents have been summarized in a table and ranked accordingly. The answers from each interview partner are attached in the appendix. As many interview respondents had
difficulties to clearly distinguish unimportant rankings, the indicator for the least important ranking has been used twice or more.

8.1.2.1. Technology

In the technology part, respondents have been asked to rank technologies according to their potential in the insurance industry, where 1 depicts the most and 10 the least important technology. The purpose of this question is to evaluate the impact of the technologies provided in the theory by Eling and Lehmann (see chapter 5.3).

From the table appendix A, it can be derived that the “winner” clearly is big data. Almost all respondents ranked the technology as the number one priority. Hefti (2019) elaborates on it by claiming that big data is the hot topic in insurance leading to better interaction, prognosis and automation. Truffer (2019) adds that big data directly influences the core business of insurances by improving risk calculations massively.

The second-best ranked technology is Internet of things. Fischer (2019) describes opportunities for trackers in the logistics sector but doubts the implementation in households. Pugnetti (2019) argues in the same direction and states that Internet of things could be used for cranes to control if they have been overloaded when there is a claim.

Cloud computing is ranked third and interview partners agreed on the positive influence on the insurance business, but some doubted a significant impact. Whereas Truffer sees definitely potential, Pugnetti (2019) states that Cloud computing can cut costs but does not have a strategic impact on the insurance business at itself. Hefti (2019) stresses out that Cloud computing helps to fasten the development.

Blockchain goes alongside Cloud computing. This is also highlighted by Fischer (2019), who claims that Blockchain could be used, but there are still many challenges and open questions such as energy efficiency or the actual user case.
The opinions about the impact of Robo advisors diverged heavily. Pugnetti ranked it as the most important technology and Hefti as third. On the other hand, Fischer and Truffer ranked it as having no impact. Pugnetti (2019) stresses out that the strength for Robo advisor lies in the advice piece. This in contrast to Fischer and Truffer, who both added Robotics as a missing technology. Hence, for them, the impact is more in the automation of processes at itself than automated advice.

Other technologies such as website, video calls, video platforms and mobile devices with apps can be neglected as the ranking shows that no significant impact can be expected.

In the part, where interview partners could add missing technologies, it can be concluded that almost all respondents concentrated their answers on the key word automation. For example, Pugnetti mentioned dark processing. Dark processing in the insurance industry refers to automatized processes that proceed in the background. The answers from Fischer and Truffer go in the same direction as they claim that robotics, artificial intelligence and machine learning will make the difference. Hence, again, technologies that are mainly used to automate and enhance current processes. Lastly, Hefti (2019) states that virtual and augmented reality will be of importance in the future. Thereby he argues that these technologies could be used to enhance the underwriting process (Hefti, 2019).

8.1.3. Value chain

In the value chain part, respondents have been asked to rank the impact of technologies on the primary and support activities. The intention of it is to find out which activities could be changed to enhance the insurance business. The evaluation of the interviews can be found in the appendix. In the subsequent section, the most important results are presented.
8.1.3.1. Primary Activities

As illustrated in Figure 12, underwriting is the primary activity that offers the most potential, followed by sales and claim management. Hefti (2019) claims that big data or data analytics will change the underwriting process fundamentally. He elaborates on it by stating that the focus lies on interaction, prognosis and automation (Hefti, 2019). Furthermore, sales is ranked as the second most important primary activity. Only Hefti sees less potential and ranked it as second least susceptible activity for change. Also, in the claim management opinions diverged. Hefti sees most changes in this area, whereas Pugnetti ranked it as unimportant. In marketing, product development and contract admin & customer service interview experts did not see high potential and ranked it in the middle. Lastly, Asset- & risk management achieved the lowest ranking. Only Fischer (2019) sees here chances through better data analytics.

Very different to the others answered Truffer. He stated that the real need for change is in the interconnectedness of those primary activities (Truffer, 2019). Thereby, he stresses out that for him, the room for improvement is in understanding the client better and act as one entity. In other words, the technology should enhance the communication between primary activities to ensure that each department works together with the other one instead of each doing something on his own (Truffer, 2019). That is why, in the evaluation in the appendix K, Truffer has no values in the answers of primary activities.
8.1.3.2. Support Activities

As depicted in Figure 13, IT and Human resources stand out in comparison to the other support activities. Three experts ranked IT as the most affected support activity. Secondly, Human resources is by most respondents assumed to undergo significant changes. However, almost all interview experts mentioned that human resource management is not going to change in its processes but rather the people and their mindset must change. Therefore, the people hired will be very different. Pugnetti (2019) elaborates on it by mentioning that in a digital company, the skill set you need is very different from today. Truffer (2019) agrees by claiming that companies need to undertake a cultural change to achieve digital transformation. The other support activities as well have opportunities to change certain processes. Nevertheless, no significant changes as in IT or human resources are to be expected.
8.2. Case Studies

8.2.1. Case Study Swiss Industry Analysis

The following section intends to depict the results from the Swiss insurance industry analysis and interpret the implications for insurance companies.

- **Competition Battle**
  The Swiss insurance market is in a stagnation phase. Gross premiums in the life sector declined over the past years, and only a small incrementation in the non-life sector has been annotated. Further, profits declined over the past years almost by half due to new challenges faced in the insurance market such as the low-interest environment, demographic changes and natural catastrophes. As a result, a heavy increase in the competition battle is inevitable because of the fact that the few powerful companies in the market have high desired growth rates. Additionally, new competitors in the market in the form of InsurTechs further accelerate the process.
• **Extradited Supplier Power**

Swiss insurers face significant bargaining power of suppliers in the context of capital and IT solutions. During the analysis and the interviews, it can be seen that the reinsurance companies dictate the price for risk capital. Besides, the IT suppliers can exercise substantial pressure once they entered an insurance company with their services. As changes in IT suppliers are difficult and linked to the loss of essential knowledge, the IT suppliers are in the position of charging high prices for the services.

• **Exploit the Powerlessness and Irreplaceability**

The bargaining power of buyers is still very low but growing slowly. This powerlessness is connected to the small effect of a unique buyer on the insurance company, resulting in low power over prices and products. Nevertheless, buyers are very important for insurers and transparency is increasing with online platforms. Therefore, customer centricity needs to be at the core of each insurance strategy. Another opportunity for insurers is that their business at its core is almost irreplaceable. Currently, almost no valid substitute exists for replacing the fundamental idea of insurance. However, the rising sharing economy needs to be kept in sight by insurers as it changes the interaction of customers with the insurance company.

• **Regulations and SST**

The SST is the tool for assuring the solvency of Swiss insurers also in a worst-case scenario. Consequently, more technical reserves need to be made to ensure that Swiss consumers are protected in any scenario, leading to decreased profitability and attractiveness for the Swiss insurance industry. Especially, as the EU solvency test requires lower capital reserves. On the other hand, Swiss insurers are also protected by the SST as it raises the entry barriers for new entrants.
8.2.2. Case Study Helvetia

- **Trigger Innovation and New Business Ideas**
  Referring to the strategy of Helvetia, organic growth should be triggered by innovating new business ideas. Several strategic steps stimulate the achievement of such innovations. First of all, an M&A strategy is enforced to have new growth fields, possibilities to learn from technology and to complement the ecosystem “Home”. A paragon of such an acquisition is Moneypark as elucidated in the case study of Helvetia. Furthermore, a corporate incubation program enables the employees to be involved and test new business ideas to their applicability in the insurance business. Lastly, cooperations, corporate venturing and prototyping are used to push innovation. A paragon of such cooperations is smile.direct, which enables the insurer to learn and offer simple and direct insurance products. The corporate venturing fund of 55 million has been founded to invest in start-ups that modernize insurance or act in any related field.

- **Exploit Digitalization**
  For Helvetia digitalization means extending the online business models and implementing smart data & analytics and automation. By doing so, the company offers an omnichannel approach to its clients to interact in many different ways with the company. Smart data & analytics is also supposed to be beneficial for the customers as it increases the personalization. Although automation is firstly beneficial for the company at itself as it makes processes more efficient, it also enhances the customer journey by providing service provisions faster.

- **Customer centricity**
  At the heart of the strategy 20.20 is the customer journey and convenience. All triggered business ideas need to go in hand with the core value proposition of Helvetia: simple. clear. Helvetia. By putting the customer at the center, the company ensures that all innovations strictly focus on the customers’ expectations. Besides, the proximity to the customer allows to observe a change in the behavior and adjusted contemporary.
• **Regulations and Low-interest Environment**

Helvetia tackles the capital requirements of the SST by continuing a conservative asset liability management. In this manner, the low-interest environment is addressed by a repositioning in the life business. Thus, the company focuses on capital efficient life products and modern guarantee concepts to secure yields in the long-term.
9. Discussion

In the following chapter, the results from chapter 8 will be discussed and critically viewed. The chapter is structured in the way of discussing first the sub-questions and then concluding by the main research questions.

9.1. Relevant Technologies

By conducting secondary research, the list of important technologies for insurers by Eling and Lehmann has been found and described in chapter 5.3. In order to test the relevance and practical applicability of these mentioned technologies, interview experts have been asked to rank them according to their potential in the insurance industry.

As evaluated in the appendix A, many of the technologies have been ranked as not relevant by the interview experts. More precisely, website, video calls, video platforms, social network and mobile devices with apps are not considered as having a significant impact on the insurance business. Cloud computing, blockchain and robo advisor have been ranked as a medium influence. On the other hand, big data and internet of things are expected to massively change the insurance business. Interview experts also had the chance to add missing technologies. Not surprisingly, most experts added technologies that focus on automation such as dark processing, machine learning and artificial intelligence. Consequently, it can be said that from a practical perspective, it is expected that there is a substantial change, which will be driven by technologies that focus on automation.

9.2. Big Data & IoT as a Disruptor?

In the paragraph above, big data and internet of things have been identified as the most influential technologies. In the following paragraph, their disruptive potential will be tested by taking into considerations the innovators dilemma of Christensen elucidated in Chapter 5.4.
Big data has been defined in this paper as huge data sets that are analyzed computationally to reveal similarities. Hence, the technology could be used to improve the risk selection, underwriting or fraud detection. This enables insurers to be more efficient because they can choose better the risk and calculate more adequately. If applied to the innovator’s dilemma, it becomes clear that big data is a sustaining technology. Firstly, the value proposition is the same. Namely, the insurance products itself or the idea of insurance is not changing, only the efficiency is. Christensen (1997, p. 10) stated that sustaining technologies are new technologies that improve the performance of existing products. As a result, it can be said that big data has the characteristics of a sustaining technology. It is only improving the current product performance and is not offering a different value proposition. Additionally, it overshoots current customer needs and is not introduced in insignificant markets.

On the contrary, there is internet of things. The technology refers to a connected world, where devices exchange information by using sensors. The idea behind has disruptive potential because it significantly changes the insurance business. For instance, if it is assumed that cars drive fully autonomous, the traditional insurance business changes fundamentally. This is because of the fact that insuring autonomous cars serves a different need. First, the insurance is not held by the driver itself, instead it is completed by the manufacturing company. In addition, the risks would change radically, resulting in difficulties to underwrite by experience or data analytics. Lastly, the question arises who is responsible for a car accident. Consequently, the author believes that internet of things will be a disruptor in the future. However, today the technology takes the form of a sustaining technology as it is still in its fledgling stage and used for improving the product performance of existing products.

9.3. Nature of InsurTech

For the purpose of answering the sub-question if InsurTechs are of disruptive nature, the form of primary and secondary research has been chosen. First of all, as secondary research as before for the technologies the innovator’s dilemma of Christensen builds the theoretical
foundation. This has been complemented by the InsurTech matrix of Braun and Schreiber, which represents the different types of InsurTechs in the market. To have a practical testing of these theoretical findings, interview experts have been asked about the disruptive potential of InsurTechs. Because of the contradictive opinion of literature and interview experts, a practical evaluation of the most famous InsurTech Lemonade will be conducted to find a consent.

According to Braun and Schreiber as elucidated in the chapter 5.5.1 only a few InsurTechs are considered as disruptors. In their InsurTech matrix, Lemonade is defined as such a disruptive company because of the fact that it goes further than the standard digitalized business model (Braun & Schreiber, 2017, p. 91). This is in sharp contrast to the interview results. All experts agreed that currently no InsurTech is considered as being disruptive (Pugnetti, 2019; Fischer, 2019; Truffer, 2019; Hefti, 2019). The reason mostly mentioned was that InsurTechs did not change the traditional business model so far. That is why the author applies the example of Lemonade to the theory of the innovator’s dilemma to find a consensus.

As mentioned above in theory, Lemonade is considered as a game changer because of its fee-based revenue system and charity approach (Braun & Schreiber, 2017, p. 91). The start-up differs from other insurers by approaching the insurance business exclusively on digitalized channels. Hence, most customer interaction such as policy calculation or claims processes are executed by a chat booth that is managed by artificial intelligence (Lemonade, n.d.). Another aspect that makes that start-up different is its charity approach. Lemonade charges the customer only a flat fee, the rest of his money is used to pay claims and leftovers are donated to a charity of the customers’ desire (Lemonade, n.d.). By comparing Lemonade with the elements provided in the theory of Christensen, it can be concluded that Lemonade most likely is not of a disruptive nature. First of all, Lemonade is currently not serving a totally different value proposition than any other insurance. Only the way of interaction and the internal processes are modernized. The next factor, for determining the disruptiveness is provided by the fact where it is sold in the beginning. According to the theory, Lemonade should sell the product in emerging or insignificant markets. In contrast to this crucial
element, Lemonade is planning to get a global insurer but currently sells the product exclusively in the United States of America. Thus, it can be said that at the moment, Lemonade is of sustaining nature. Nevertheless, the author reckons that InsurTechs such as Lemonade impose a severe threat for traditional insurers. The implementation of automatized processes and digital distribution channels can be a potential competitive advantage. Moreover, more innovations from Lemonade can be expected that could have a disruptive impact. Therefore, insurers should not underestimate the potential of InsurTechs and constantly analyze the start-ups’ scene to avoid a backdrop towards them.

9.4. Potential Change in Value Chain Activities

The potential change in value chain activities has been analyzed by making use of primary and secondary research. Therefore, the secondary research built the fundament for the primary research because the value chain for insurances by Rahlfs based on Porter has been used. The interview experts then ranked the value chain activities according to their potential, as represented in the interview results section.

Based on the analysis conducted the following primary activities are suspected to change substantially: underwriting, sales and claim management. The focus of change lies in the key of automation and data analytics or respectively, by referring to Hefti “interaction, prognosis and automation” (Hefti, 2019). The support activities are expected to experience significant shifts in the IT and human resources. Almost all experts agreed that most changes are going to happen in the IT department. Experts emphasized that technology will not lead to changes in the HR process but rather the hired people’s attitude needs to change. Truffer (Truffer, 2019) elaborated on it by stating that digital transformation requires a cultural change.

The author believes that the above-presented results show a tendency of which activities could change in the short-term. However, the technology available offers multiple options for each value activity. As identified in the literature of Porter, in order to create a competitive advantage, a firm-specific value chain has to be executed.
9.5. Impact of Technology

The research has shown that technology offers multiple opportunities for the insurance industry. The trend is underlined by many InsurTechs that entered the market as they took their chance. Yet, the business models of them rely mostly on online distribution channels and simplified customer interaction. The traditional insurance and the basic idea of risk transfer is still unimpaired. At the moment, the importance of technology lies in the enhancement of the customer journey and automation of processes. Insurers should learn from InsurTechs and simplify insurance products and the customer interaction. It is vital for the insurers not to lose the point of sales, rather should they interact with the client as early as possible. This is due to the fact that if InsurTechs besiege the client intersection, insurers would not be able anymore to build up a client relationship. Further, cross- and upselling would be impossible. The insurance would only take over the form of a risk taker, which leads to a brand identity loss as well as high bargaining power for InsurTechs. Another opportunity for the insurance industry is imposed by automation. Many processes can be automated to act more effectively and cost-efficiently. In the future, more specialized products could be developed with the opportunities offered by big data and internet of things. These kinds of products are going to be very complex. Thus, experience and a solid capital base are needed to introduce such products in the market. Therefore, the author critically views the jeopardization of incumbents by InsurTechs, instead he believes that the possibilities offered by technology are playing into the hands of insurers if exploited rightly.

9.6. Strategic Responses

The following section aims at drawing a framework for strategic responses towards the challenges and opportunities encountered in the analyses. Therefore, in the first section, the strategic responses by Helvetia will be tested to their applicability on the challenges and opportunities identified throughout the case study Swiss insurance industry analysis and
interviews. Secondly, the challenges and opportunities not addressed by Helvetia’s Strategy 20.20 will be depicted and complemented with possible strategic responses.

9.6.1. Applicability of Helvetia’s Strategy 20.20

In Figure 14, the outer circles define the strategic responses to the challenges and opportunities which are represented in the inner circle.

As described in the Helvetia result section, the company triggered innovation and new business ideas. This strategic response addresses the competition battle identified throughout the Swiss Industry analysis. By doing so, Helvetia seeks to grow by innovative products, merger and acquisition, corporate incubation, cooperations and a corporate venture fund. Apart from having new revenue streams, Helvetia tackles with its strategy also the new competitors and InsurTechs. In the section of the strategic reaction of incumbents, several strategic responses to confront InsurTechs have been elucidated. Whilst comparing to Helvetia’s strategy, it can be seen that the company takes very similar strategic steps. First of all, lightweights can be neglected and there is no need for strategic response. According to Braun and Schreiber, usual suspects need to be attacked by incumbents. Helvetia does this within its strategy by clearly focusing on innovations which lead to higher performance of the existing products. The InsurTech threats are aggressively tackled by Helvetia in their merger and acquisition and corporate fund strategy. The disruptors already passed the investment stage. Consequently, insurers should develop their core capabilities, which is done by Helvetia as they focus on their core strength of customer interaction. Lastly, the enablers are approached in a cooperative manner. This way, Helvetia ensures to learn from technologies without being exposed to major risks.

By exploiting digitalization, Helvetia focuses on smart data & analytics to unleash new business models. Therethrough, the company takes advantage of the opportunities offered by technologies, which lead to an enhanced customer journey, increased personalization and more efficiency. What is more, by this means Helvetia can grow in the saturated market by
exhausting the fact that low switching costs and missing substitutes characterize the market. In other words, if Helvetia is able to implement digitalization efficiently, the clients from other insurance companies are able to switch promptly as the switching costs are low and no other substitutes could serve the same necessity.

By putting the customer values at the core of its strategy, Helvetia ensures the proximity to the customer, which leads to a constant fulfillment of the customer’s needs and expectations. Helvetia there lies the focus on convenience and the customer journey. The former one secures that innovation and digitalization target at products and distribution channels that are direct, simple and convenient for customers. The latter aims at describing that a customer has to be satisfied along the whole value chain. As a result, the company can increase positive switching costs, which leads to more customer loyalty and happiness.

The last strategic response of Helvetia aims at taking crucial actions against the course of the interest environment. The company pushes forward a repositioning of the life business to be able to face the low-interest environment. Another important decision was taken by deciding on continuing the capital management in a conservative manner. This way, the strict requirements of the SST are complied.
9.6.2. Complementation of Strategic Responses

In the chapter above, the strategic responses of Helvetia have been allocated to the challenges and opportunities. The strategy 20.20 is tackling many changes but as identified throughout the paper, there are more challenges to overcome and opportunities to exploit as illustrated in Figure 15. Therefore, this chapter aims at showing strategic responses that have not been addressed by Helvetia.

Throughout the interviews, it has been recognized that insurers are extradited to supplier power when talking about reinsurances or IT suppliers. As mentioned by Hefti, IT suppliers can be steered by contracts. Therefore, the author believes that insurers should set up strict contracts and plans which protect them and decrease the bargaining power of IT suppliers.
In the Swiss insurance industry analysis, it has been identified that internet platforms such as Comparis widen the transparency in the market, which leads to more bargaining power of customers. As a result, Swiss insurers should see this as a chance and strive for simplified products and customer interaction. By doing this, the insurance company will be known on the platforms by clients for the ease of complementing policies. Besides, customer satisfaction will increase as the change will result in more convenience on the customers’ side. Moreover, through automatizing processes in the underwriting, sales and claims management insurance companies can gain a cost advantage and work more effectively.

Another critical aspect in the sense of technological change is the human resources that has to challenge a cultural change within the firm. Throughout the interviews conducted, it became clear that the culture in the insurances needs to change as up to today insurances are still known for being slow movers. Therefore, human resources needs to adjust and contract people with the right mindset, skills and openness towards technological change because the employees are the ones that shape the culture of a company.

Similarly to the cultural change is the digital transformation process that releases the structural change within a company. In the definition section it has been pointed out that the digital transformation contains more elements than just digitalizing the customer channels. It is suggested to structure the organization in a way that it can react faster and more effective on the environment resulting in not missing out on trends such as the sharing economy for instance.
Figure 15 Missing strategic responses (own illustration)
10. Conclusion

10.1. General Conclusion

The purpose of this thesis was to give the reader a holistic understanding of the drivers and implications that change the Swiss insurance industry. A further objective was to analyze the impact and nature of technology and InsurTechs. Finally, the paper aimed at revealing strategic responses that insurers could implement to address the challenges and opportunities revealed.

The first chapter elucidated the importance of this paper from a business and an academic perspective. It was followed by the second chapter, which was intended to clarify the specific objective of the paper as well as the main and sub-research questions. The goal of the third chapter was to give the reader a better understanding of the insurance industry and determine the meaning of digital transformation. Especially, the identification of digital transformation was important, as it made clear that a digital transformation is a one-time process. In this process, a company needs to change its structure in a way that it is able to react quickly and effectively on new technologies and procedures.

In the fourth chapter, the author depicted the methodology used throughout this paper. The paper consisted exclusively out of qualitative research. Therefore, a literature review provided the author with a theoretical foundation. This was completed with expert interviews, which were important to complete and test the theoretical framework. Finally, with the information gathered, two case studies were executed to have a practical analysis of the Swiss insurance industry and the strategic responses of a Swiss insurer.

Chapter 5 was introduced to give a theoretical basis. Therefore, the strategic tools, Porter’s five forces and value chain, have been elucidated and critically viewed. Thereby, Porter’s five forces built the basis to perform the case study Swiss insurance industry analysis. On the other hand, the value chain has served for the expert interviews in order to understand which value chain activities will undergo a change shortly through the impact of technology.
Furthermore, the innovator’s dilemma theory was described as it built the fundament for analyzing the disruptive nature of technologies and InsurTechs. Lastly, the literature about the InsurTechs nature and the strategic reaction of incumbents have been expounded.

In the chapter 6, the Swiss insurance industry analysis has been conducted. The aim of it was to give the reader an understanding of the forces that drive the Swiss insurance market. The chapter revealed that the Swiss insurance market is characterized by medium to high but steadily increasing market rivalry. Further, the analysis showed that the reasons for this development are: market saturation, declining profits, high desired growth rates by insurers, new entrants in the form of InsurTechs, demographic changes and the low-interest environment.

Chapter 7 analyzed the strategy 20.20 of the Swiss insurer Helvetia. Further, it provided the reader with the necessary information about the history and current market position. The analysis showed that the company addresses especially three key drivers of change, namely digitization, regulations and new competitors.

Chapter 8 introduced the results from the expert interviews and case studies. The interviews contradicted with the theory by stating that InsurTechs are of sustaining nature. Additionally, big data and IoT have been identified as the most important technologies. In the value chain primary activities, the most potential lies in the underwriting, sales and claims management. In the support activities, the change is assumed to happen in the IT and Human resources. The case study results as elucidated before, have been summarized in this section.

Chapter 9 discussed the results critically. Firstly, the technologies mentioned in the theory have been discussed with the interview results, resulting in big data and IoT as the most important technologies. Secondly, the nature of them has been analyzed yielding in the fact that currently they are of sustaining nature but especially IoT could change in the future to a disruptive nature. Then the value chain activities results have been discussed, concluding in the fact that there are many opportunities, but the most valuable ones are in underwriting, sales, claims management, IT and human resources. Then the first part of the main research
question has been answered by revealing the impact of technology. Technology brings new competitors but also new opportunities for insurers to enhance their business by the automation of processes and the enhancement of the customer journey. Finally, the strategic responses of Helvetia have been tested to the challenges and opportunities identified throughout the whole paper. It resulted that the strategy of Helvetia did not address all changes. Therefore, additional strategic responses have been elaborated to tackle the left off opportunities and challenges.

10.2. Contributions

This paper contributed to the strategic decision making of Swiss insurance companies. It provides the reader with information about the expectation and changes in the Swiss insurance market. Further, the paper refuted the disruptive nature of technologies and InsurTechs. Besides, the opportunities to create competitive advantage in the value chain have been identified. The thesis then concluded by explaining the impact of technology and stating which strategic steps need to be taken by Swiss insurers to hold the strong position in the insurance market.

10.3. Limitations

This thesis has several limitations, which will be explained as followed. First of all, as stated in the theoretical framework of the value chain, to be able to find a competitive advantage, a firm-specific value chain has to be conducted. Because such data is very internal knowledge, the author was not able to recollect the necessary data to conduct a value chain in the case study of Helvetia. Consequently, the findings of the value chain are limited to the main activities and no specific change of under activities has been identified.

Secondly, the study determined the most critical technologies for the Swiss insurance industry. Thereby, the paper is limited as no specific analysis about the implementation of
such technologies has been conducted. Further, not much theoretical literature is available in this research area.

Thirdly, whilst analyzing the nature and threat of InsurTechs the author did not differentiate between InsurTechs conducting business in Switzerland and worldwide. Consequently, in the analysis conducted, the InsurTechs gained more weight. Mainly, because the best InsurTechs are conducting business outside Switzerland.

Fourthly, the author reached out to interview experts from well-known Swiss insurance companies and a University of Applied Science. However, no interview could be conducted with insurance consultants. Therefore, the interview results are limited as interview consultants may have a different perspective on the topic.

Lastly, the paper is written in English. Nevertheless, only one interview has been conducted in English because the author preferred to conduct the other interviews in their native language to ensure that no quality gets lost. The author of this paper then transcribed the interviews in German.
11. Recommendations

Based on the findings and the above-elucidated limitations, the following chapter reveals a recommendation for further research.

First of all, a more practical research should be conducted to reveal real-life examples of competitive advantage through the potential change in the value chain. It is suggested that the study specifically focuses on the implementation of technology. Further, the researcher should have the necessary data about the specific activities executed as well as a cost analysis. With this analysis, a best-practice example could be created, which then could serve for industry benchmark analyses.

Secondly, a further study of the Swiss InsurTech scene is suggested. Braun and Schreiber identified the nature of the start-ups and revealed strategic reactions. Nevertheless, through the fast development and funding, InsurTechs need to be continuously observed. In addition, the study could elaborate on practical examples by focusing on possible cooperations between incumbents and InsurTechs.

Thirdly, the analysis showed that there might be an upcoming change through the evolvement of the sharing economy. As a result of this, further research is recommended to exactly analyze the influence and threat imposed on the traditional insurance business. Further, it could shed light on strategic reactions on this topic.

Fourthly, it is recommended to have further research in the area of structural and cultural change towards digital transformation. The research than could include a best-practice analysis of different companies that implemented a successful change that allows them to react contemporarily and effectively to changes in the external environment.
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Truffer, S. (2019, April 03). Interview by N. Hefti. (N. Hefti, Interviewer)


## 13. Appendices

### Appendix A: Summarized Ranking Technology

<table>
<thead>
<tr>
<th>Technology</th>
<th>Carlo Pugnetti</th>
<th>Sibylle Fischer</th>
<th>Sacha Truffer</th>
<th>Silvio Hetti</th>
<th>Total Value</th>
<th>Rank</th>
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<tr>
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<td>1</td>
<td>1</td>
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<td>Artificial Intelligence &amp; Robotics</td>
<td>Machine Learning &amp; Robotics</td>
<td>Virtual Reality &amp; Augmented Reality</td>
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Appendix B: Summarized Ranking Primary Activities

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<tr>
<th>Activity</th>
<th>Carlo Pugnetti</th>
<th>Sibylle Fischer</th>
<th>Sacha Truffer</th>
<th>Silvio Hefti</th>
<th>Total Value</th>
<th>Rank</th>
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## Appendix C: Summarized Ranking Support Activities

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<th>Silvio Hefti</th>
<th>Total Value</th>
<th>Rank</th>
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Appendix D: Interview Guide Company Experts

Part Market Rivalry

1. What is your competitive advantage (Products, Pricing, Promotion, etc.)?
2. Which substitutes in the insurance market can be considered as threat and why?
3. How do you experience consumer trends and the bargaining power of them?
   (Bargaining power = the ability of a person or group to get what they want)
4. What are the most important suppliers of you and how is the bargaining power of them? (Bargaining power = the ability of a person or group to get what they want)
5. How do you cope with the may upcoming regulations towards data security?

Part Technology

6. Rank the below mentioned technologies according to their potential in the insurance industry. (best = 1, worst = 10)

   - Big data
   - Internet of things
   - Blockchain
   - Cloud Computing
   - Mobile devices with apps
   - Robo advisor
   - Social network
   - Video calls
   - Video Platforms
   - Website

7. If you think in the question above have been missing technologies, you can add them here.

   - .................
   - .................
   - .................
Part Innovators dilemma

8. How far would you say is the traditional insurance business threatened by insurtech’s?
9. Where do insurtech’s dock with insurers?
10. You currently pursue an investment strategy, where you invest in start ups and insurtechs. Which ones do you invest in and why?

Part Value Chain

11. Which parts of the primary activities in the value chain will be challenged through digital transformation? (Rank: 1 to 7, 7= lowest potential and 1 highest potential)

12. The ones you ranked with 1 to 3. Which processes or activities can be converted? and by using which technology?
13. Which parts of the support activities in the value chain will be challenged through digital transformation? (Rank: 1 to 6, 6= lowest potential and 1 highest potential)

14. The ones you ranked with 1 to 3. Which processes or activities can be converted? and by using which technology?
Appendix E: Interview Guide Specialist

**Part Market Rivalry**

1. Through which strategy are insurers gaining market share (ex: price, promotion, product differentiation, brand loyalty)?
2. Which substitutes exist in the insurance market and which ones can be considered as threat?
3. How do you experience consumer trend and the bargaining power of them?  
   (Bargaining power = the ability of a person or group to get what they want)
4. What are the most important suppliers and how is the bargaining power of them?  
   (Bargaining power = the ability of a person or group to get what they want)
5. What restrictions can insurers expect through the upcoming regulations towards data security? In which areas do you see impediments?

**Part Technology**

6. Rank the below mentioned technologies according to their potential in the insurance industry. (best = 1, worst = 10)

- Big data
- Internet of things
- Blockchain
- Cloud Computing
- Mobile devices with apps
- Robo advisor
- Social network
- Video calls
- Video Platforms
- Website

7. If you think in the question above have been missing technologies, you can add them here.

- .....................
- .....................
- .....................
Part Innovators dilemma

8. How far would you say is the traditional insurance business threatened by insurtech’s?
9. Where do insurtech’s dock with insurers?
10. Insurers are nowadays investing heavily in start ups and incubators. In which areas should insurers invest in and why?

Part Value Chain

11. Which parts of the primary activities in the value chain will be challenged through digital transformation? (Rank: 1 to 7, 7= lowest potential and 1 highest potential)

12. The ones you ranked with 1 to 3. Which processes or activities can be converted? and by using which technology?
13. Which parts of the support activities in the value chain will be challenged through digital transformation? (Rank: 1 to 6, 6= lowest potential and 1 highest potential)

<table>
<thead>
<tr>
<th>Support activities</th>
<th>General management</th>
<th>IT</th>
<th>Human resources</th>
<th>Controlling</th>
<th>Legal department</th>
<th>Public relations</th>
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<td>Primary activities</td>
<td>Marketing</td>
<td>Product development</td>
<td>Sales</td>
<td>Underwriting</td>
<td>Contract admin &amp; customer service</td>
<td>Claim management</td>
</tr>
</tbody>
</table>

14. The ones you ranked with 1 to 3. Which processes or activities can be converted? and by using which technology?
Interviewer: So, I would like to start off with the first question in the part market rivalry. Through which strategy are insurers gaining market share?

Dr. Carlo Pugnetti: Well, so here we have to be careful again on definition. Because different companies in different markets use different strategies. So, I assume we are talking about Switzerland.

Interviewer: Yes, in the whole interview we talk only about Switzerland in the life and P&C.

Dr. Carlo Pugnetti: And again, here is an issue of which company but overall. Switzerland is a very stable, very rich market with a high margin. But not a lot of growth. So, a lot of the market share gains that are minimal are either happens due to loyalty. Brand loyalty with cross- and upselling. You delve deeper to the relation with the customer. A typical example is Mobiliar which is very good at the distribution model and is very good in local contact, and very good in tailoring local products and the claims process. Otherwise, the other piece that we are seeing quite a bit specially in P&C, is on differentiation on products. The attacker brands smile direct for example. So, you start seeing very focused single product, maybe 2 or 3 products for particular costumer segments, focused on digital distribution and digital products. They tend to compete more on price.

Interviewer: So, they do not provide a wide range of products? Just specialized products?

Dr. Carlo Pugnetti: At least that’s how they start. And then let’s see how they evolve.

Interviewer: And then they widen up the product range?
Dr. Carlo Pugnetti: It is likely to happen. You start with a homeowner’s policy for example or a renter’s policy, because you are tackling younger people. You know fairly simple moto products and then once these customers are acquired in 10- or 20-years’ time, they become core customers.

Interviewer: Yes, because I read your article about millennials. Where you talk about the process of buying insurance products is not very transparent. So, product differentiation there could be for such an insurance company to focus on one insurance product and be more transparent.

Dr. Carlo Pugnetti: One piece that you think off is built in brand loyalty and product is the advice piece. A lot of insurance market share gains is made by advice. Whether it's automated or online. Don’t forget the advice piece, that is a big differentiation in the market. So, it’s not just price, product and promotion. Which substitutes exist in the market? Again, its product specific and it depends on what we understand as an insurance what does it do. Insurance fundamentally is risk transfer. So, if you look at risk transfer, life is not always the case. In life you can also have an investment vehicle basically. It’s a way to allocate resources to an investment portfolio, to an asset portfolio. But in the most fundamental way you do risk transfer if you do risk transfer, it’s not that easy to substitute insurance. You can either self-insure and save money. You have hire deductibles in your policy. That does exist. This is your ability as insurer to take certain tranches of risk but if you. Otherwise, for specific pieces of risk, you can have for example warranties issues. So, you can for your dish washer, for your car, there are some pieces that may go under warranty. That is another way of transferring risk. Otherwise, it is fairly. There really not a lot of ways in which you can attack, really substitute this risk transfer. There ways in which you can buy part of the services for example that the insurance provides. For example, access to a network of car dealers, car suppliers and repairs but in the very core risk transfer there is no other option. You have to have an insurance company, and this is a very regulated market. You have to be an insurance company in order to take risk.

Interviewer: Because of the Swiss Solvency Test 2?

Dr. Carlo Pugnetti: In general, since, I am not sure in Switzerland when it started but I would assume in 1910-1920. In order to sell insurance, you have to be an insurance company. You need to have a certain legal form, you have to be regulated by FINMA, you have to fulfill some requirements in terms of the people of you have and how trained they are and how much reserves they have.

Interviewer: Especially the reserves are important in this case I imagine.

Dr. Carlo Pugnetti: Not only but it is a big piece of it. And but the reserve, the capitalization is getting less important.
Interviewer: Less important? I thought it is going to be more important.

Dr. Carlo Pugnetti: Yes, less. The financial markets are becoming more optimized, more efficient. So it’s much easier to recruit capital than it used to be. There is a lot of offshore capital that you can recruit.

Interviewer: What is an example of such an offshore capital which you can access?

Dr. Carlo Pugnetti: All you need to do, is look at any reinsurance company. There is specialized funds offshore and they can be the ones that run the riding part of your risk.

Interviewer: So okay, so you can transfer the risk again back to the reinsurance. I thought through the heavy regulation, the Swiss solvency test has restricted capitalization even more?

Dr. Carlo Pugnetti: Yes, you need to be heavier capitalized. The companies are much more stable, so they have more capital than they used to, which has implications for profitability. Because the more capital you have the more opportunity cost you have for this capital.

Interviewer: How do you experienced consumer trends and the bargaining power of them? You know the term bargaining power?

Dr. Carlo Pugnetti: Yes, that is clear. In general, again I assume were talking about Switzerland?

Interviewer: Yes, it is all about Switzerland.

Dr. Carlo Pugnetti: So, consumers are better informed than they used to be. They are better educated, and they are less inclined to just listen to somebody’s advice than they used to.

Interviewer: Usually now they check online?

Dr. Carlo Pugnetti: They check more and they much more critical, which is good for the industry because it forces the products to be better. So, consumer trends are definitely towards more empowerment, more information, decision with consumers. Switzerland does not have very good consumer protection laws. So that’s coming, it’s much better in other countries.

Interviewer: I thought competition policy and consumer protection is a big thing in Switzerland.

Dr. Carlo Pugnetti: Yeah but you still are able to do certain things with your costumers which you are not allowed to do in other countries. For example, in Switzerland, if you don’t cancel
a policy 3 months in advance it continues. No were else that’s the case. It’s just not allowed. If you change the wording of the policy, so if you change the policy, you have to give customers the opportunity to leave but the rules for doing that are very specific. Switzerland is much more understanding of this than other countries are. Switzerland forces you to in year-end policies. If I subscribe a policy on September 10th, it runs from September 10th until September 9th of the next year, so you have this rolling, you know portfolio change that means you are actually, for you as a consumer it’s much easier to change than changing just on January 1st. Meaning that I have to make the decision on the September 30th. This forces decisions that are not acceptable anywhere else. Switzerland was one of the last countries to force opt in vs. opt out policies. Switzerland is catching up. It’s not bad but it’s much much less regulated. Especially compared to the EU and the US. But so, they are getting more powerful, but we are behind the curve. And suppliers, the power of the industry is really not on the suppliers because insurance companies are regulated. Suppliers cannot substitute, they cannot go forward in the market. What may be happening is reinsurers are trying to jump over the primary insurers to deal with large partners. So, if you are Swiss Re for example, you don’t work through Allianz to get to the customers of Volkswagen, but you try to contact directly with Volkswagen. It is interesting, but they still don’t know how to do claims.

Interviewer: Because it is a big process to learn the claims? That is why the primary insurer has an advantage, but I imagine that the reinsurer also will get better in claims?

Dr. Carlo Pugnetti: Yes, this is correct (talks about advantage of primary insurer). No, they don’t want to do claims.

Interviewer: Ah they still don’t want to do claims?

Dr. Carlo Pugnetti: No, so if you look at a reinsurance company. Reinsurance company are set up to have contracts, Swiss Re with Allianz for example. They have fairly complicated contracts on different things, but the claim is one claim a year for 100 million dollars. It is not a million claims for 5000 dollars. It is a completely different issue. One very large claim versus every day the phone rings 350 times a year you have to do something.

Interviewer: So, for Allianz, it is more to automate the process and for Swiss Re it is more one claim to have to analyze with a big team. So, it is a totally different process.

Dr. Carlo Pugnetti: So again suppliers, you are starting to see some power with IT suppliers because they are able to sell their expertise and sell the outcome of the expertise but not the expertise itself. So, you know, dark processes for example. There are platforms to do that for you, the rules by which they do this for you and improve the process, you may do not understand it anymore as insurance company.

Interviewer: They just show you how to use it but not doing by yourself?
Dr. Carlo Pugnetti: Once you give that a way, you lose the expertise in-house. This is what happens to the automotive companies. When they start trusting and building parts, not just components, but assemblies with the suppliers they lost the ability to understand how those are built. Not just to manufacture them, but actually to develop them.

Interviewer: Also, like insurance encounters a lot of legacy costs. They have really complex IT infrastructure and landscapes.

Dr. Carlo Pugnetti: They sure do.

Interviewer: So, I think it is a big thing here.

Dr. Carlo Pugnetti: Yes, it may be but again. Because the industry is so heavy regulated, it is really hard for them to be independent. They can be a stronger supplier, get margin, but it is very hard to basically to replace the insurances.

Interviewer: And then for the restrictions that insurers can except from data security?

Dr. Carlo Pugnetti: Not a lot. That is already quite strongly regulated.

Interviewer: So, you can use the information you gather from your consumers? Nowadays. So, you could do big data with or data analytics with the data you gather from you consumers to improve your product portfolio or the claim processes and you think there is no impediment that they will more regulate the usage of data that you gather from your clients.

Dr. Carlo Pugnetti: I don’t really see that happen. The trend is in the exactly opposite direction.

Interviewer: So, you think it will be more open then it is today.

Dr. Carlo Pugnetti: Today, your very heavily regulated on where you can place costumer data and what you can do with it. There is also a difference in banks between banking and insurance, between what kind of third part you can use, or you can’t. And I think if anything for insurance this will open up. I think we will have better access to more data about costumers. I don’t think we will be able to sell our information or the insurance information outside, but I think we can bring it in. We can bring in external data quite heavily.

Interviewer: Because this would be quite good. But then the market would be more regulated because you could get data from people and if they call you and want to make an insurance, you know the person and can say this is a bad person in terms of insurance, so you don’t sell…
Dr. Carlo Pugnetti: You can do that today. If you go to Salesforce for example. They basically have this. Salesforce is a CRM tool. And you can do it with your customers where you can access their information. Through other means. And you know how much cheaper the policy will be if they allow you to use that information. You don’t know what the information is, but it is in the system and the system will tell you how much cheaper your policy can be. But the customers need to open up. The system knows it but you don’t know it as an agent. If you give me your address or the car you are driving, whatever, we can probably give you a discount of 10 to 15 percent. You have that information today in the system.

Interviewer: This is impressive.

Dr. Carlo Pugnetti: You need to feed the system. You need to go out and get user data but it’s there.

Interviewer: So, for the next part. I would like to talk about the technologies, if you could rank them like from best to worst and you have also the possibility to add technologies if you think one is missing.

Dr. Carlo Pugnetti: What do you mean with best and worst?

Interviewer: Best and worst, I want to stress out that you could say, big data is having the best opportunities for the insurance.

Dr. Carlo Pugnetti: Best in terms of it can improve or in terms of risk. Is it the impact or improvement?

Interviewer: The impact.

Dr. Carlo Pugnetti: Impact can also be negative.

Interviewer: How could the impact be negative?

Dr. Carlo Pugnetti: Because somebody does it better than you.

Interviewer: Yes, this would be interesting to see but then we have to stress it out.

Dr. Carlo Pugnetti: Okay. So, I think that the biggest impact could be with this automated advisory processing. The second one would be with good data from IoT. This is the first is advice, customer retention. For example, chat booths, but especially advice. The key is advice. It’s not I don’t know where my policy is, and somebody says its stage 7 and you use the information. Here it is, I don’t know which product to buy or which coverage I need. It’s advice, it’s not just subservice platform. The second piece is Internet of Things because here you can do much better risk selection. Big data feeds a little bit into this. Big data is already
dead as a term. It’s already passed, passé. So, it has the same kind of impact in terms of risk selection. Blockchain and cloud computing they are ways to optimize a process. They can cut some cost, but I don’t see any strategic meaning. And the rest either used or will not have strategic impact.

Interviewer: Okay. Perfect. You have another technology you want to add?

Dr. Carlo Pugnetti: Well there is a piece here that I am kind of missing. It may be part of this. It’s anything related to dark processing. So, its automated processing but not in an advice model.

Interviewer: For example, an automated claim process.

Dr. Carlo Pugnetti: Exactly.

Interviewer: Perfect. How far you would you say is the traditional insurance business in Switzerland threatened by insurtech’s?

Dr. Carlo Pugnetti: It is a life and death race. It’s life and death and we don’t know it yet because we have very large install bases that turnover long time and we are protected by regulatory. So, change happens very very slowly in the insurance and it happens usually with generation change or at least product change. In US you have in 7 years customer life cycle, in Switzerland you have 20 years life cycle. So, things will happen much less quickly in Switzerland. The problem is once it starts to be happening they will erode this profit and revenue pool. So, we will no longer be able to carry the fixed costs. So, if you lose 5 percent of your revenue, you lose maybe 20-30 percent of your profit if not the whole of your profit. And once you lose that part of customer segment then you can no longer carry the fixed cost. So, I think it’s a life and death race but... But you are not talking about the companies you talk about traditional model. So, you talk about the business model.

Interviewer: Yes, I do not talk about the companies. I talk about the traditional insurance business model.

Dr. Carlo Pugnetti: I think we are poised to have some fundamental change. And if you look at the ways in which you have strategic control in insurance. Usually, there is some very specific business models but usually it’s one of four things. Strategic control is either because you have capital, and this is eroding, this is no longer the differentiator. So, if you were Swiss Re or Zurich you have the capital. So, you have the capacity, you can underwrite big risk and many risks. You can gain market share and retain share just because you have the capital. That’s no longer really the differentiators. You can build a very solid position just by being the cost leader. Being very efficient in processes. A lot of companies are moving for this reason to automated processes, they are moving to European companies rather than local
swiss companies. So, you can build this European platform that are automated, and you can achieve pretty good economies of scale. Allianz for example is quite known for that.

Interviewer: Ah Allianz already does this today?

Dr. Carlo Pugnetti: Yes, that is what they are trying to do. It is not super successful, but they are trying to go down that path.

Interviewer: I think it’s quite a difficult path to totally automated processes through the IT infrastructure (legacy cost) you had from the past years. So, I think it’s quite difficult to overcome this and automate such a process.

Dr. Carlo Pugnetti: Not really, it just takes a lot of money.

Interviewer: And many years?

Dr. Carlo Pugnetti: Or you start from scratch, you start with a new product or a new business model.

Interviewer: So, you still have the traditional insurance business and start besides with one product.

Dr. Carlo Pugnetti: Yes. And as those products get good, then you slowly transfer the individual piece of your portfolio. You can do that, but you have to have a solid base first and then you can start migrating. So that’s the if you will the expense ratio. The third piece is risk selection. You can just be smarter by the way which you understand risk and you price it accordingly and you have this very big hammer in insurance called anti-risk-selection.

Interviewer: I have never heard from this. What is it? You say no to customers which are too risky, or you price them high?

Dr. Carlo Pugnetti: The issue there is not what happens to your portfolio. The issue there is what happens to your competitor’s portfolio. So, you and I, both moto insurance. And you offer. You looked at the market and on average everybody should pay 100 francs for the insurance. That’s a way of doing it. And I go in and say, well I think actually men and women drive differently. And so, the actual price is 120 francs for men, typically men are riskier, and 80 for women. On average still 100. Your price is not incorrect, but I state differently. So, what happens that I get all the women at 80. And I may or may not make money because it depends on whether I priced it correctly. But you will get all the men, you will charge them a 100 and they will cost you 120. So, buy changing the way in which I segment the market, I have given you crappy costumers.

Interviewer: And you have got the good customers?
Dr. Carlo Pugnetti: Well, I have got the fairly priced customers. I may still do not make any money of the women. But you certainly lose 20 on average on men. That’s adverse selection. My behavior, my risk selection kills your portfolio. And that’s going to be the trick with the insurtech’s. If you are able to identify through IoT for example or through behavioral markers good risks or bad risks and price them accordingly. So, having a complete different way of understanding and selecting and pricing risk. That is what going to kill the traditional model. Because the traditional model is fundamentally a risk pooling model.

Interviewer: So just make not really very good risk calculations, so you just take a lot and have an average risk you cover.

Dr. Carlo Pugnetti: You still good at-risk calculation, you just didn’t used the right segmentation. You are still good in your analysis, but I have a different way at looking at. If you look at lemonade for example. Lemonade is a very interesting company. If you look at the board, Daniel Schreiber is on the board. He is a behavioral economist and he writes if you read his articles, very good articles. It has a really good blog as well on how people cheat. He researches about cheating and it turns out we all cheat about 10 to 15 percent. You and I and somebody from Brazil, from Argentina, from China, we all roughly cheat about the same. But we cheat differently according to social settings. So, for example if I lie to you and because of my lie you give me money versus I lie to you and somebody else give me money. I am more inclined to cheat in the second case. If you have a test and at the beginning of the interview you have people to sign the ten commandments, even though that are not Christian will cheat less. So, there is all this little trick of cheating and not cheating and if you look at how Lemonade sets up their process. If you file a claim, in insurance we know the so-called soft fraud, where we like to claim a little bit more than it was. And we know that there is a problem of about 10 to 15 percent. We roughly know how much that fraud is. And usually it is priced in the model, we know that it is there, that is why we all pay 10 to 15 percent more premium. But if you are Lemonade, the process to file a claim, you have to do it by video. And you look at yourself, and you don’t lie. So, you look at yourself lie and then you catch yourself and don’t lie.

Interviewer: So, because you see yourself you don’t lie.

Dr. Carlo Pugnetti: That is why they have the video claim reporting. So, if they do that theoretically they would be able to offer 10 percent cheaper premiums. Let’s see if it works out.

Interviewer: It’s an interesting approach. I though they may analyze they voice and stuff.

Dr. Carlo Pugnetti: They do that as well. They also, you write this pledge and you sign they pledge ahead of the following of the claim and not at the end. So, you have all these markers for telling the truth.
Interviewer: Because if you sign it in the end you would say, okay I already lied so I can’t take it back.

Dr. Carlo Pugnetti: So, I think this kind of things. This risk selection models can be very dangerous for insurance companies because they will trigger adverse selection. IoT is another piece. I was talking to a guy from ETH and its typical problem for example in construction and insurance in construction, as a construction company you lease cranes. And cranes of course can only carry a certain amount of weight. They are normed to a certain amount of weight and claims are typically related to them being overloaded. That is why they break if you have to much weight on them.

Interview: Then usually the insurance does not apply I imagine?

Dr. Carlo Pugnetti: Yes, but first you need to proof it. How can you proof it? The construction company will tell you no we did not overload it. All you need to do, is to install sensors, IoT. So, you have a live feed on what the loading of the Crain is. And you if you use blockchain you can even automatically cancel the policy.

Interview: And here you also do not have any data protection problems?

Dr. Carlo Pugnetti: You make it part of your policy that you can access the data. And if the companies that have a bad history don’t want to sign it. Fine. They can go to a competitor. You have your risk selection.

Interview: Because there is no policy that enforces you to insure the costumer, not like in health insurance.

Dr. Carlo Pugnetti: So, anyway that is the third piece. The fourth piece is about costumer retentions. Costumer relationship models. Advice, services, prevention, loss control kind of things and it’s got a little bit of the same flavor. There are some companies that will be better understanding what customers want and it’s not clear that those companies will be insurance companies. Google, Amazon they understand you as a person much better than an insurance company ever will. They just be able to set up a financial service to you. We are starting to see some of them. Some startups are asset based. They will say you own a home, come to us and we will tell you how to maintain the home, how to buy and sell it, we have a whole set of suppliers that can paint it, fix the garden, build a wall, do the kitchen, clean the house, do the roof. We will tell you if a storm is coming you need to whether proof your house. And we also really good at insurance policy, right.

Interview: So, Ecosystem models right.
Dr. Carlo Pugnetti: Right, we are starting to see ecosystem around asset clusters. So, we see some around home, cars. A little bit less around pets for example. Not as much around family or children but the thing is just a matter of time.

Interview: Because also Helvetia has triggered an Ecosystem home.

Dr. Carlo Pugnetti: They all do.

Interview: For me it’s always like when I look at the insurance market, they all seem so similar. Strategy are the same, the portfolios are the same. So, it is quite hard to distinguish them.

Dr. Carlo Pugnetti: Well, I think that is an issue because you’re in Switzerland. Switzerland is a very stable, not price sensitive and profitable market. So, they all play the same game of retention and upsell.

Interview: Because usually you gain customers because your family has been always covered by the same insurance company.

Dr. Carlo Pugnetti: Not really. That is actually an interesting transition that the companies are not managing very well.

Interview: Because I did see that you have been writing about this adverse effect it can have when the father tells his son and he has negative feelings about it.

Dr. Carlo Pugnetti: They advisor for the parents is not always, and in fact seldom the right advisor for the children. There is just too much age different. They talk a different language. So, it happens but you see loyalty in the people, but much less loyalty through the generations. They all investing in startups and incubators. Fundamentally, they should invest in all of them because an investment displays an option. You basically buying an option. In any option for portfolio differentiation.

Interview: Where you can add to your portfolio, that is why you should invest. Because from the outside it looks like in the incubator they are just investing randomly. So, it’s hard to tell what strategy they are following when they invest in such startups.

Dr. Carlo Pugnetti: And they may not be investing in the startups. Having an incubator, there is not translating to investing. OK you give them a coffee machine and a desk. It’s minimal investment for insurance companies. Where it gets interesting when actually do equity participation. An insurance company typically shies away from strategic investments, usually don’t invest in startups because of the technology. It’s usually an arms-length investment relationship. It’s changing but typically still the case.
Interview: Now to the value chain. First at the primary activities, if you could rank them again.

Dr. Carlo Pugnetti: I think there is a timing issue. So, I think underwriting, so risk selection will come quicker. I am not sure that risk selection will have the biggest impact or the customer retention advisory model. But I think this will come later, this automated advice will come later. I think this will feed into product development, so the way which you price it. So, it’s very hard to do this without this. So, it’s very hard to do product without costumer service. So, I think these two are related. I don’t think this is the big piece. I don’t think admin is the big piece. I think it’s the services will be fairly important, and this is linked to product. I think here because of social media online you may have an impact. I think claims will have an impact but it’s just not a strategic impact. It’s a cost efficiency impact. The real intelligent in the system is going to be here.

Interview: Internet of things, big data, to improve underwriting and risk selection.

Dr. Carlo Pugnetti: Yes, you will use this information to deny claims but the way you leverage it is early on already. That is why I say this, and it breaks my heart because I come from claims. But I think the benefits you get here you will get from doing this better. And then asset and risk management. I am not a big fan of asset management anyway.

Interview: And then the same for the support activities.

Dr. Carlo Pugnetti: And again, we are looking at impact. So I think you will have to types of impacts in HR. The type of kind of people that you need to recruit. In a digital company is very different. And they need to have different skill sets and you don’t want 100 people that pick up the phone and talk the customer. You want two people to design a system that take care of it. They need to be very skilled to understand what is going on. If you take human resources as hiring and training and retaining, I think that is a big piece. I think also the process of HR, target setting etc.

Interview: Also in the selection you could optimize it. The first-selection of candidates.

Dr. Carlo Pugnetti: I am not a big fan of that.

Interview: I think they do it already.

Dr. Carlo Pugnetti: They do a way too much. They sort for cover letter and keywords and so on. So I think this will happen. Controlling, I think the process today is very costly and inefficient. Generally, KPI measurement. I think we will become much better at real time data. Not the decision making. The decision making, setting targets, leading people is still here. But it will have much deeper real time information. And by the same token, I think IT. You need a different bread of people and it will become much more important to a
functioning organization then it used to be. It will no longer be a support function. You could argue that it is a primary vital function.

Interview: Especially in the business of financial services.

Dr. Carlo Pugnetti: And then the other ones, I don’t see in a real sense automated. There is expertise based, decision systems. You may have good case information. You may have automated proposal. But at the end of the day somebody has to say that is the strategy we follow. I think it will be more difficult to have a real fundamental change. You will have better information and better support, but you still need the lawyers, the PR people. You may have more or better channels but still you need people. Somebody needs to lead, and the system can’t do that for you.

Interview: Perfect. Thank you very much for taking this time.
Appendix G: Interview Ranking Results Dr. Carlo Pugnetti

Part Technology

1. Rank the below mentioned technologies according to their potential in the insurance industry. (best = 1, worst = 10)

<table>
<thead>
<tr>
<th>Rank</th>
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<tbody>
<tr>
<td>3</td>
<td>Big data</td>
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<td>2</td>
<td>Internet of things</td>
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<td>4</td>
<td>Blockchain</td>
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<td>4</td>
<td>Cloud Computing</td>
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<td>10</td>
<td>Mobile devices with apps</td>
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<td>1</td>
<td>Robo advisor</td>
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<tr>
<td>10</td>
<td>Social network</td>
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<td>10</td>
<td>Video calls</td>
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<td>10</td>
<td>Video Platforms</td>
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<td>10</td>
<td>Website</td>
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2. If you think in the question above have been missing technologies, you can add them here.

1. **Dark Processing / Automated Processes**

Part Value Chain

3. Which parts of the primary activities in the value chain will be challenged through digital transformation? (Rank: 1 to 7, 7= lowest potential and 1 highest potential)
4. Which parts of the support activities in the value chain will be challenged through digital transformation? (Rank: 1 to 6, 6= lowest potential and 1 highest potential)
Interviewer: What is your competitive advantage? Also was macht euch bei der Baloise aus. Ich habe gesehen in der Strategie 20.20 wollt Ihr eine Million neue Kunden gewinnen. Wie wollt ihr das erreichen? Product differentiation oder eher Brand Loyalty.

Frau Sybille Fischer: Die neue Million neue Kunden wollen wir durch neue Angebote.

Interviewer: Also, durch product differentiation?

Frau Sybille Fischer: Ja, das geht ja weiter. Wir haben ja Friday und digital insurance in Berlin und das ist ein Teil. Das andere ist das was wir mit Casco machen, die single light insurances. Unserer competitive advantage aus der Vergangenheit ist die Kundenselektion. Wir haben ein Kundenwert Modell entwickelt. Das sieht man auch in unserem vorletzten Investor Day. Ich glaube das war im 2013 und dort ging es darum wie beurteilt man Kunden und was sind die Kunden, die wir gerne wollen. Nach dem Motto wir wollen die sichersten Fahrer. Ich glaube, wenn man darunter geht ist das der competitive advantage.

Interviewer: Also ist ein gutes Underwriting für euch sehr wichtig. Aber trotzdem auch Start-ups um das Portfolio zu diversifizieren und neue Produkte rauszubringen. Mit einem Produkt zu starten.

Interviewer: Aber ihn im Boot zu haben ist sehr gut.

Frau Sybille Fischer: Ja, klar. Denn der Point of Sales in der Versicherung ist sehr schwierig. Das zeigen genau alle Insurtech’s.

Interviewer: Also ist das die kritische Schnittstelle mit dem Kunden?

Frau Sybille Fischer: Ja, beziehungsweise. Ich glaube da an ein anderes Modell der Versicherung in der Zukunft.


Interviewer: Und auch durch die Regulatoren sind die Versicherer geschützt in Ihrer Geschäftstätigkeit?


Interviewer: Da ist ja auch das Problem mit den Apps oder?

Interviewer: Merkt ihr aber auch das mehr Kunden online Verträge abschliessen oder eher nur online abchecken und dann persönlich abschliessen?


Interviewer: Die nächste Frage zielt auf das gleiche ab aber aus der Sicht der Suppliers. Zum Beispiel IT-Suppliers.


Interviewer: Man hat dann halt ein einfacher IT oder?

Frau Sybille Fischer: Ja, klar aber man hat dann halt das Risiko, dass wenn der mal weggeht hat man ein Problem. Aber das ist ja das gleiche mit Microsoft.

Interviewer: Als grosse Firma hat man dann ja auch rückwärts wieder grossen Einfluss.

Frau Sybille Fischer: Ja, genau.

Interviewer: Was ich dazu noch Fragen wollte, macht ihr die Erfahrung das Reinsurer euch überspringen und direkt mit euren Kunden Verträge abschliessen?
Frau Sybille Fischer: Das machen sie nur wenig. Wenn dann gehen sie über MGA (Assekurateure). Das sind wie Broker die aber auch den Schaden und das Underwriting machen aber keine Bilanz haben. Das gibt sehr viel Insurtech’s was das auch machen. Der Reinsurance Markt war in der letzten Zeit sehr weich. Das heisst sie hatten zu viel Kapital und wussten fast nicht wohin damit. Also sie haben einem gerne als Kunde genommen. Darum ist das Verhältnis ok. Die Frage ist halt was passiert, wenn sich die Situation wieder einmal ändert.

Interviewer: Die letzte Frage betrifft Data Security also Datensicherheit. Wie geht ihr mit Kundendaten um, könnt Ihr diese nutzen für Produkteentwicklung etc.? Und was erwartet ihr in Zukunft?

Frau Sybille Fischer: Der Kunde muss halt für alles zustimmen.

Interviewer: Und der liest es halt meistens nicht oder?


Interviewer: Im ersten Schritt würde ja der Kunde gewinnen und dann die Versicherer.


Interviewer: Nächster Punkt Technologie. Wie kann man die einordnen, was haben die für Potenzial für euch? Von 1 bis 10. Und da kannst auch hinzufügen.

Frau Sybille Fischer: Also fehlen tut für mich Artificial Intelligence. Alles was selber macht also auch Machine Learning. Video calls und platforms sind für mich eigentlich nicht wichtig aber eher noch platforms.
Interviewer: Und Video calls um online Abschlüsse zu erzielen?


Interviewer: Wegen des Datenschutzes?

Frau Sybille Fischer: Ja, aber vor allem auch das man dann wegen eines Wasserdetektors weniger Prämien zahlt. Diesen Fall sehe ich nicht. Baustelle und so kann aber gut sein.

Interviewer: und bei Autos?


Interviewer: Dann wäre es eher eine Cyber Risk Insurance?


Interviewer: Wie siehst du das sich die traditionelle Versicherung verändern wird?

Interviewer: Eigentlich machen es die Insurtech’s ja einfach einfacher für den Kunden?


Interviewer: Also auch Lemonade ist nicht disruptiv?


Interviewer: Wo siehst du das die Insurtech’s mit den Insurer’s zusammenkommen? Wir haben es ja schon angesprochen im Bereich Kundenschnittstelle, was die Hauptfälle sind.

Frau Sybille Fischer: Es gibt noch viel mehr. Wir haben in einen Startup investiert das heisst Stable. Das macht parametrische Insurance für Landwirte. Das heisst die können kleine Mengen gegen die Preise versichern. Das ist ein neues Modell von Insurance was es vorher nicht gegeben hat. Das ist auch unsere Investment Strategie. Es muss etwas Neues sein, was es vorher nicht gegeben hat. Und dann muss es ein tolles Team sein, bei denen wir glauben die machen das Gross und dann muss es auch einen Markt dafür geben. Der Return of Venture muss adäquat sein.

Interviewer: Also sucht ihr Möglichkeiten eure Produkte zu diversifizieren?
Frau Sybille Fischer: Ja und vor allem auch in grössere Geografien gehen und mit der Baloise zusammen zu arbeiten und etwas zu kreieren. Per se müssen wir dort wo wir investieren daran glauben, dass es etwas Grosses wird.

Interviewer: Es geht also nicht um Technologien zu lernen?


Interviewer: Das wäre eigentlich bereits die nächste Frage gewesen. Was ist eure Investment Strategie?


Interviewer: Also so Ecosystem mässig?

Frau Sybille Fischer: Ja genau. Auch Home. Das sind halt alles Ecosystems, wo man gerne reinschaut und schaut was könnte interessant für uns sein. Das ist dann halt das wo man dann beim Schiff beyond insurance nennt.

Interviewer: Ich glaube so Ökosysteme sind ja gross am kommen in der Schweiz. Jeder ist ein bisschen dabei.

Frau Sybille Fischer: Da wird sich dann zeigen wer das Beste Angebot hat.

Interviewer: Dann würden wir zur Value Chain kommen. Zuerst mit den primary activites von der klassischen Versicherung. Wo siehst du die grössten Veränderungen, die stattfinden in der nahen Zukunft mit den neuen Technologien die es so gibt?


Interviewer: Aber vor allem AI und Machine Learning?

Frau Sybille Fischer: Ja, es ist halt auch die Hoffnung gewisse Tätigkeiten wie abtippen von Formularen automatisiert.
Interviewer: Dann noch zu den support activites. Nochmals die gleiche Frage.

Frau Sybille Fischer: Also IT wird sich natürlich ändern. Aber es wird natürlich immer noch eine IT geben. Ich glaube eher auch wie arbeitet zusammen, agile, mehr flache Hierarchien, mehr selbst Organisation.

Interviewer: Sowie die IT heute schon aufgestellt ist.


Interviewer: Also Maschine ist eher um Daten besser zu analysieren und einfacher machen für den Menschen.

Frau Sybille Fischer: Genau aber als support. Also ich sehe es eher so.

Interviewer: Wunderbar, Danke vielmals.
Appendix I: Interview Ranking Results Sibylle Fischer

Part Technology

1. Rank the below mentioned technologies according to their potential in the insurance industry. (best = 1, worst = 10)

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<td>Website</td>
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</tbody>
</table>

2. If you think in the question above have been missing technologies, you can add them here.

1. Artificial Intelligence
2. Robotics

Part Value Chain

3. Which parts of the primary activities in the value chain will be challenged through digital transformation? (Rank: 1 to 7, 7= lowest potential and 1 highest potential)
4. Which parts of the support activities in the value chain will be challenged through digital transformation? (Rank: 1 to 6, 6= lowest potential and 1 highest potential)


Interviewer: Mit Friday und diesen «Startups»?

Sacha Truffer: Ja haben wir das ja auf Gruppenebene. Das kann ich natürlicher weniger beurteilen. Aber da gibt es ja die Sternen am Himmel wie Friday, aber in der Schweiz selber machen es wir sicher mit der Gegenstandsversicherung, die online sehr schnell abschliessbar

Interviewer: Also das Ziel ist so Kunden ins Boot zu holen und dann up selling zu machen?


Interviewer: Also so Lebensversicherung?


Interviewer: Also eine Mischung aus Produkt und Marketing und Service?

Sacha Truffer: Ja, genau es ist eine Mischung.


Sacha Truffer: Ja, es gibt schon unterschiedliche Ansätze vor allem auch über Insurtech. Zum Beispiel eine Community wird gebildet die sich selber versichert und gewisse Risiken. Spüren wir bis anhin aber eigentlich nicht wirklich. Die Frage ist ob mit Substituten auch
gemeint ist, dass man merkt das über das Produkt, welches verkauft wird, auch Versicherung angeboten werden.

Interviewer: Also Produkte mit Garantien? Im Bereich Sharing Economy?


Interviewer: Ich habe gehört das die Rückversicherer teilweise auch in dieses Geschäft eingestiegen sind und somit den Erstversicherer zu überspringen. Stimmt das?


Interviewer: Also Ecosysteme?

Sacha Truffer: Ja, Ecosysteme ist ein riesiger Begriff, was das alles umfasst ist unklar. Banal würde ich es reduzieren auf Kooperationen. Und dort versuchen wir am Point of Sales präsent zu sein. Jetzt gibt es Versicherer, die das Interesse haben und auf Hersteller zu gehen. Umgekehrt gibt es aber auch das Interesse der Verkäufer, die dann selber Versicherungen anbieten wie zum Beispiel Amazon. Man weiss die investieren in den Versicherungsmarkt um das für sich selber aufzubauen. Da hatte man natürlich lange Angst, dass wenn das in der Schweiz ein Thema wird kannst du unsere Gegenstandsversicherung zu machen.

Interviewer: Da Amazon andere Daten und Auswertungsmöglichkeiten hat?

Sacha Truffer: Genau.
Interviewer: Also wäre das neben den Insurtech’s die größte Gefahr in der Schweiz? Das Google und Amazon in den Markteintritt?


Interviewer: Die Marktregulierungen würden so etwas zulassen?


Interviewer: Die nächste Frage haben wir bereits abgedeckt. Also wie seht ihr Kundentrends und die Bargaining Power von den Käufern? Welche Kraft kann der Kunde auswirken?


Interviewer: Also das eher die Kunden vielleicht mal ein Preis digital abchecken aber dann immer noch persönlich abschliessen? Sie suchen den persönlichen Kontakt.

Interviewer: Also so ein bisschen Google Ads wo du auch pro Click zahlen kannst?


Interviewer: Aber so Lebensversicherung sind dann halt einfach zu komplex für online Vergleiche?


Interviewer: Bei Versicherungen hast du halt ein Vertrag, der läuft einfach ohne viel Kontakt und die Produkte sind komplex. Deshalb willst du halt wirklich ein Papier zu Hause haben. Sogar ich als eher junger Mann will es schriftlich auf Papier haben.

Sacha Truffer: Voila!

Interviewer: Also ist die Digitalisierung gar nicht da wo man meint?

Sacha Truffer: Im Moment noch nicht zum Thema Versicherungen, dass kann aber jederzeit schwappen. Das sehen wir jetzt aber noch nicht. Es gibt hier auch Untersuchungen, die zeigen das, dass digitale Verhalten über alle Altersgruppen gleich ist und zwar gar nicht vorhanden. Deshalb ist es immer noch schwierig. Die Logik sagt zwar überall machen wir es, also muss es früher oder später auch in der Versicherung kommen. Ich glaube bei der Versicherung hat man wirklich das Gefühl man muss etwas in der Hand haben falls ein Leistungsfall eintritt.
Was man früher wirklich auch gemacht hat, nach der Police gefragt. Also sie haben nach dem Vertrag verlangt, die quasi deinen Anspruch gerechtfertigt haben. Heute ist das natürlich viel kulanter, weil wir alles digital haben. Das kann schon sein, dass es seine Zeit braucht bis das in unseren Köpfen umschaltet.

Interviewer: Die nächste haben wir ja schon beantwortet. Nun zur Datensicherheit. Wie sieht ihr das? Ist das ein Thema bei euch?


Interviewer: Ist natürlich vor allem auch ein Kostenpunkt die data security einzuhalten.


Interviewer: Das ist gleich ein gutes Stichwort um zu den Technologien überzugehen. In welchen Technologien siehst du das Potenzial?

Sacha Truffer: Cloud-Computing ist gleich das Thema das wir besprochen haben. Potenzial in Bezug auf was?
Interviewer: Um Versicherungsprozesse oder Kundenschnittstellen oder Produkte etc. zu verbessern.

Sacha Truffer: Das ist wirklich eine schwierige Frage. Hast du bewusst devices with apps geschrieben? Ist mobile oder die Apps das Thema?

Interviewer: Es zielt auf die Einsetzung von Apps ab.

Sacha Truffer: Okay, gut. Darf ich die wegstreichen bei denen ich keine Bedeutung sehe?

Interviewer: Ja, klar.

eher zurückhaltend. Ich würde sagen Big data ist 1, Cloud computing ist 2, Webseite 3, Blockchain 4, dann 5 und der Rest 10. Ich bewerte es stark aus Kundensicht. Was vom Kunde gewünscht wird.

Interviewer: Wie hast du das Gefühl ist das traditionelle Versicherungsbusiness gefährdet durch insurtech’s?


Interviewer: Aber für euch ist das ja eigentlich keine Gefahr? Oder nimmt es euch den Kundekontakt weg?


Interviewer: Also wie Lemonade?


Interviewer: Ihr habt ja auch viel mehr Erfahrungswerte auf, die Ihr zugreifen könnt.

Sacha Truffer: Das Einzige was uns diesbezüglich brutal zum Verhängnis werden könnte ist das die Kundenbedürfnisse massiv von einem auf den nächsten Tag verändern und das unsere Systeme viel zu starr sind um auf die Veränderung zu reagieren. Und dann ist ein Kundenbedürfnis da, dass du nicht befriedigen kannst und dann gehen die einen anderen Weg. Und wenn dann ein insurtech das aufnehmen kann, dann haben wir ein Problem. Aber solange das das nicht passiert sehe ich da keine Gefahr.

Sacha Truffer: Ich weiss nicht was die Strategie ist. Ich kann dir da leider keine Auskunft geben.

Interviewer: Okay kein Problem. Bei der Value Chain bei den primary activities. Wo siehst du die grössten Veränderungen mit den Technologien?

Sacha Truffer: Ich würde sagen das grösste Problem ist die Vernetzung von all dem.

Interviewer: Was meinst du damit? Kommunikation?


Interviewer: Also musst du zuerst das Bedürfnis genau analysieren?

Sacha Truffer: Genau. Also was mein idealer Prozess wäre. Du gehst hin und analysierst das Kundenbedürfnis gemeinsam. Du holst das Marketing, Development, Claims Manager etc. rein und sagst so und jetzt zusammen machen wir qualitative Kundeninterviews und holen die Bedürfnisse für das Thema, das wir jetzt haben heraus. Und alle haben dann die gleiche Grundlage. Dann hast du alle auf einer Schiene. Am Anfang steht das Produkt Development. Für mich kommt das vor dem Marketing. Marketing machst du zur Marke und nicht zum Produkt. Darum muss immer die Produkteentwicklung zu vorderst sein. Er muss das Kundenbedürfnis einbeziehen aber auch alles das hinten dran. Zum Beispiel hinten der Claims, wenn sich die bereits in der Produkteentwicklung einbringen können, kann sich der bereits überlegen was passiert für den Kunden, wenn er dann wirklich einen Leistungsfall hat. Aus meiner Sicht macht es alles durchgängiger und für den Kunden alles einfacher. Dann hast du natürlich Unterschiede. Im Einzelfall hast du Unterschiede in der Erwartungshaltung. Einer will möglichst schnell bedient werden. Der Andere möchte möglichst ausführlich erklärt haben oder digital was auch immer. Das ist eine Erwartungshalten und das musst du einzeln managen. Da muss jeder quasi wieder in sein Silo gehen. Aber die Basis, die

Interviewer: Das gibt es aber schon oder?


Interviewer: Das gleiche noch für die support activities?


Interviewer: Bei General Management wo siehst du da die Veränderungen, die man machen könnte?


Interviewer: Super, Vielen Dank!
Appendix K: Interview Ranking Results Sacha Truffer

Part Technology

1. Rank the below mentioned technologies according to their potential in the insurance industry. (best = 1, worst = 10)

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<td>Website</td>
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</tbody>
</table>

2. If you think in the question above have been missing technologies, you can add them here.

1. Machine Learning
2. Robotics

Part Value Chain

3. Which parts of the primary activities in the value chain will be challenged through digital transformation? (Rank: 1 to 7, 7= lowest potential and 1 highest potential)
The respondent did not rank the primary activities from 1 to 7. He stressed out that he imagines the chance of digital transformation in connecting the primary activities. (more details in Transcript of S. Truffer)

4. Which parts of the support activities in the value chain will be challenged through digital transformation? (Rank: 1 to 6, 6= lowest potential and 1 highest potential)
Interviewer: Bei der ersten Frage geht es um den competitive advantage der Helvetia. Was ist eure Stärke?


Silvio Hefti: Also das sind ziemlich sicher keine Produkte, sondern eher das nicht mehr eine Person etwas besitzt, sondern das, dass gemietet wird. Dann hast du keinen Zugang ein Sachversicherer zu sein. Also im Gedanken an Sharing Economy.

Interviewer: Also das du direkt versichert bist über den Gegenstand. Aber das ist ja kein Substitut, sondern eine andere Art der Versicherung?

Silvio Hefti: Ja, dein Marktzugang ist dann halt ein anderer. Dann bist du eigentlich nur noch Risikoträger und hast dann den Kunden selbst gar nicht mehr als Kunden. Das sind dann natürlich auch die insurtech’s die den Kundenzugang übernehmen.

Interviewer: Ist also die Gefahr in der Sharing Economy die Kunden an die Rückversicherer zu verlieren, da die Kunden Interaktion nicht mehr stattfindet?

Silvio Hefti: Ja, kann man. Aber ist natürlich ein anderes Geschäft als die Rückversicherung.
Interviewer: Ich habe gehört sie gehen ja schon direkt auf andere Kunden zu wie zum Beispiel Volkswagen?

Silvio Hefti: Ja, sie wollen halt keine Schadenabwicklung wie die Erstversicherer. Sharing Economy macht natürlich das ganze grössere wie zum Beispiel Flotten Versicherung.

Interviewer: Dann hast du eher die grossen Schadenfälle als viele einzelne?

Silvio Hefti: Das find ich eigentlich das wichtigste, das ist die Hauptgefahr.

Interviewer: Dann die nächste Frage ist. Was sind die Konsumententrends, die ihr wahrnehmt? Und kann der Kunde grosse Kraft auf euch auswirken?


Interviewer: Also wäre es wichtig Ökosystem zu machen?

Silvio Hefti: Ja, Ecosystems die dir als Versicherer helfen am Start dabei zu sein.

Interviewer: Sonst verpasst du die Journey?

Silvio Hefti: Ja und dann bist du nur noch Risikoträger und kannst kein individuelles Offering mehr machen.

Interviewer: Vor allem ist ja nur Risiko tragen nicht so interessant. Da brauchst du dann ja mehr Kapital.

Silvio Hefti: Ja, dafür sind wir auch zu klein. Wir können schon in gewissen grösseren Branchen mitbieten aber man muss schon ein grösserer Marktplayer oder Rückversicherer sein um das zu machen.
Interviewer: Also zum Beispiel Zurich Versicherung?

Silvio Hefti: Ja, also einer der in den Preiskampf gehen kann durch die Masse. Du kannst dann mehr Risiko tragen und besser skalieren.

Interviewer: Wie sieht es bei den Lieferanten aus? Zum Beispiel Rückversicherer oder IT?

Silvio Hefti: Also Rückversicherer diktieren halt den Preis auf dem Markt. Wenn die viele Schäden zahlen müssen dann steigt der Preis und dann bist der Bargaining Power ausgeliefert.

Interviewer: Also der Preis für das Kapital das du versichern möchtest?


Interviewer: In Bezug auf Daten Sicherheit. Wie geht ihr damit um? Was erwartet ihr in diesem Bereich?

Silvio Hefti: Das ist natürlich eine riesige Herausforderung, weil man sich das noch nicht gewohnt ist. Aber klar, du musst natürlich alles was die Regulatoren vorgeben musst du umsetzen.

Interviewer: Also eher ein Kostenpunkt als etwas anderes?


Interviewer: Ja solange der Kunde die AGB’s unterzeichnet ist ja alles okay?

Silvio Hefti: Ja aber es gibt natürlich auch vom Gesetz her Sachen die du gar nicht machen kannst. Du musst Daten auch nach einer gewissen Zeit löschen.
Interviewer: Also könnt ihr die nicht ewig behalten?

Silvio Hefti: Nein aber wir können die Daten anonymisieren. Und dann wissen wir vielleicht halt nur noch ob es Mann oder Frau ist und wie alt. Aber nicht mehr genau wer dahintersteht. Und das musst du sicherstellen entweder löschen oder anonymisieren. Da fehlt heute halt auch Data Ownership. Wem gehören die Daten, wer muss diese sicherstellen? Das sind grosse interne Projekte. Die Frage stellt sich dann natürlich auch im Data Analytics, wie viel darfst du mit den Daten machen?

Interviewer: Ja, die Frage stellt sich dann auch. Wenn die grossen Player wie Google, Amazon in der Versicherung einsteigen und die ja dann durch die grosse Datenverarbeitung dann besser kennen, die traditionellen Versicherer verdrängen.

Silvio Hefti: Ja, aber die wollen ja gar nicht versichern. Die wollen die Kundenschnittstelle bedienen und was sie für einen Wert daraus machen können aus Ihren Daten und so. Aber das ist so eine Kapital intensive Industrie. Die wollen ja einen Return on Equity nicht 6-8 Prozent, sondern sie müssen 15 Prozent haben. Das ist in der Versicherungsindustrie schwierig.

Interviewer: Und wenn ein Versicherer eine Partnerschaft mit Google eingeht und die dann die Kunden steuern?

Silvio Hefti: Das dürfen sie nicht. Die Daten Security Themen mit GDPR und IDD zielen ja genau auf die Online Anbieter ab. Da sie teilweise ein Ranking machen, das gar nicht für den Kunden passt. So einfach ist das Brokerage da auch nicht mehr. Und insurtech’s werden die Kundenschnittstelle abdecken. Das Business Model wird sich durch Google und Amazon nicht ändern und wenn sie es nicht ändern können dann spielen sie im gleichen Teich. Und da kommen dann die Lizenzen und Regulatoren hinzu. Und wenn die in jedem Land andere Regulatoren berücksichtigen müssen, dann verlieren sie die Skalierung, die Ihnen wichtig ist. Wie man sieht ist das «Mühsame» das die Regulatoren mit sich bringen ist gleichzeitig auch ein Schutz.


Silvio Hefti: Was ist Big data für dich?

Interviewer: Hauptsächlich data analytics.

Interviewer: Ja.


Interviewer: Ist das traditionelle Versicherungsgeschäft gefährdet von Insurtech’s?

Silvio Hefti: Von den snackable products.

Interviewer: Was sind snackable products?


Interviewer: Aber das traditionelle?


Interviewer: Ihr habt ja auch incubators? Wo legt ihr Wert darauf?

Silvio Hefti: Wir wollen zum Beispiel ein Point of Sales der Technologie getrieben ist. Wir haben auch unser Ecosystem mit Moneypark etc. Dabei investieren wir in Partner um diese Ecosysteme auszubauen und wir wollen dieses Ecosystem dominieren. Dabei liegt sicher die Kundenschnittstelle immer im Vordergrund.

Interviewer: Von den primary activities. Wo siehst du die Veränderung in diesem Bereich?


Interviewer: Dann bei der letzten Frage das gleiche zu den support activities bitte.
Silvio Hefti: Also bei HR ist das Recruiting und das Verhalten der Leute sehr wichtig. Die administrativen Prozesse sehe ich hier aber nicht als wichtig. Im Legal Department mit GDPR etc. finde ich das auch wichtig. Controlling hat sicher auch seine Opportunitäten. Und die IT wird sich natürlich am stärksten verändern.

Interviewer: Vielen Dank für deine Zeit!
Appendix M: Interview Ranking Results Silvio Hefti

Part Technology

1. Rank the below mentioned technologies according to their potential in the insurance industry. (best = 1, worst = 10)

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2. If you think in the question above have been missing technologies, you can add them here.

1. Virtual Reality / Augmented Reality
2. Data Analytics (Big data)

Part Value Chain

3. Which parts of the primary activities in the value chain will be challenged through digital transformation? (Rank: 1 to 7, 7= lowest potential and 1 highest potential)
4. Which parts of the support activities in the value chain will be challenged through digital transformation? (Rank: 1 to 6, 6= lowest potential and 1 highest potential)