

# Technology Acceptance and Critical Success Factors of a Mobile Short-Term Overseas Health Insurance Application

## Masterarbeit

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# 1 Introduction

At all times, the insurance sector was confronted with different challenges. In 1994, for example, the deregulation of the insurance market at the European level led to a more intensive competition (cf. Wein, 2001: 494). Some other challenges the insurance sector had and still has to face are climatic and demographic changes and the implementation of regulatory and legal guidelines (cf. Wolgast, 2011: 47-48). Just recently, on December 21<sup>th</sup> 2012, unisex tariffs became mandatory for insurance companies and required significant adjustments (cf. Institut für Finanz- und Aktuarwissenschaften, 2012).

Today's insurance market is characterized by a high willingness of customers to change the provider and the growing importance of online and mobile distribution channels (cf. Lünendonk, 2013: 6-7; von Watzdorf et al., 2011: 207). Especially mobile applications are expected to experience a boom and to be under the top three communication and distribution channels for insurance companies in 2020 (cf. Lünendonk, 2013: 6-7). For providers, the entrance in the mobile sales sector offers benefits such as the access to and acquisition of new customer groups, an enhanced image and customer loyalty (cf. Heinemann, 2012: 192-193).

So far, the insurance sector is known for its low willingness to innovate. Providers struggle with the adoption of new technologies. While other branches are already established at the mobile commerce market, insurances have just started to enter the market (cf. von Watzdorf et al., 2011: 207-208). According to von Watzdorf et al. (2011: 210), the mobile sales market has potential: In 2011, already 31 % of the informants were interested in concluding insurances via their mobile phone.

However, a general interest in such offers does not implicate by default an application would be successful. Acceptance and usage of applications entering the market may still be questionable. So far, various mobile commerce applications from several sectors could not meet the consumers' expectations and did not attract them (cf. Bhatti, 2007: 2; Zhang et al., 2012: 1902). There are many factors that play a role for the use of an application and it is important to understand what these factors are. Therefore, it is necessary to explore which factors influence the consumers' perception and usage intention of a mobile insurance conclusion application in order to deliver an acceptable service.

In the Information Management (IM) research field, the consumers' usage intention and adoption behavior is modeled by the technology acceptance (TA) (cf. Platzer and Petrovic, 2010: 1154). The technology acceptance constitutes a crucial factor for a technology's success. Besides technology acceptance, additional critical success factors exist. To ensure an application's success, it is important to know these critical success factors in advance and take them into consideration. This requires a targeted analysis of the potential of a specific application from both, the providers' and the consumers' point of view (cf. Schulenburg, 2007: 262).

The specific application examined in this master thesis is a mobile short-term overseas health insurance application. Due to the fact, that many people do not have an overseas health insurance, but often need one on short notice for a limited period of time (e.g. during a vacation), a short-term overseas health insurance policy appears to be a suitable object of investigation for a mobile insurance conclusion application.

This thesis aims to contribute to the theory foundation in the mobile commerce research field by identifying important factors for consumers' acceptance of the described insurance conclusion application. Besides technology acceptance, additional critical success factors are investigated. The results will help providers to consider the right factors when launching a mobile application for the conclusion of a short-term insurance. Consequently, the following research questions (RQ) are formulated:

- **RQ1:** Which factors determine the consumers' technology acceptance of the mobile short-term overseas health insurance application?
- **RQ2:** Which critical success factors are important for the success of the mobile short-term overseas health insurance application in addition to technology acceptance?

The main focus lies on technology acceptance, which is considered to be a prerequisite of common usage and thus success.

In the following, Chapter 2 describes the theoretical background and gives an overview about basic terms, characteristics and concepts of the insurance sector, mobile commerce and technology acceptance research. In Chapter 3, the status quo and current development of the market for mobile insurance conclusion applications in Germany is examined. A literature review is performed in Chapter 4 to identify crucial factors for the technology acceptance that have been proven to be influential in for-

mer studies on mobile commerce. Building on the findings of the literature review, important factors for the technology acceptance of the investigated application are derived. In Chapter 5, explorative interviews with experts and potential users are carried out, to examine the importance of the derived factors and to discover further important factors that lead to technology acceptance. In addition, the experts are interviewed regarding critical success factors for the investigated application. Chapter 6 gives recommendations for practitioners of the insurance sector with regard to the findings. The limits of this thesis are described in Chapter 7. Chapter 8 presents a final conclusion of the thesis and an outlook for research and practice.

## 2 Theoretical Background

### 2.1 Introduction to the Insurance Business

#### 2.1.1 Definition of basic Terms

The terms “risk” and “insurance” are relevant for the understanding of the following insights into the insurance business and are therefore explained first:

- **Risk:** At first, risk is being defined, as it constitutes the reason why insurances exist. “[R]isk is defined [...] as uncertainty concerning the occurrence of a loss” (Rejda, 2005: 3). The loss can either regard a person (e.g. illness, accident, death), a thing (e.g. fire, burglary) or an economic situation (e.g. unemployment) (cf. Koch, 1998: 24). The existence of risks is inevitable (cf. von der Schulenburg, 2005: 39). Therefore, individuals can either accept, avoid, reduce, limit or shift risks. In case of a low risk and low financial loss, individuals can accept the risk without being burdened too much when a damage occurs. Some risks can also be avoided completely by not taking those risks. For example the risk of getting hurt by performing extreme sports can be avoided by not doing extreme sports. A risk can also be reduced by decreasing the probability of occurrence (e.g. flu immunization). A risk limitation strategy can be used to restrict a case of loss (e.g. water sprinkler system against an emerging fire). Finally, risks can be shifted towards another party by concluding insurances in order to avoid the emerging financial loss (cf. von der Schulenburg, 2005: 39-40; Wein, 2001: 13).

2010: 325). Against the aim to question people of all ages, only people up to 30 years of age could be interviewed. The asked acquaintances between 31 and 60 years were privately insured or did not own a smartphone or tablet PC, which disqualified them from the study. Thus, the results are only valid for younger consumers. By verifying the quality of the data and analyses in Chapter 5.7, a communicative validation was not performed due to time restrictions and an alternative method was chosen. However, further studies should apply the communicative validation, as the confirmation of the results by the interviewee can prove whether the results are highly significant. As the intention to use does not necessarily mean that the application is actually used, this study cannot predict whether the consumers will certainly use the application but only whether they intend to use it (cf. Vogelsang et al., 2013: 1428).

## 8 Conclusion and Outlook

This thesis aimed to contribute to the theory foundation in the field of mobile insurance conclusion applications by examining factors for the technology acceptance and by identifying critical success factors for a mobile short-term overseas health insurance application. Therefore, a comprehensive literature review on mobile commerce, mobile financial services and mobile/online insurances was carried out. As a result, an overview of all thus-far investigated factors for the consumers' acceptance was derived and important factors for a further analysis were selected. For the examination of factors influencing the technology acceptance and the identification of critical success factors for the investigated application, explorative expert and user interviews were designed, conducted and analyzed according to Mayring (2010). In the following, the findings were discussed and summarized and an overview of the confirmed important factors for the technology acceptance and further critical success factors was provided. A quality criteria checking verified the significance of the results. Based on the findings, recommendations for practitioners were formulated. In addition, the limitations of the thesis were presented. The thesis concludes with a final summary of the most important findings and an outlook for the future.

The results show, that user acceptance exists, when the factors *perceived usefulness*, *perceived ease of use*, *price*, *trust*, *conditions* and *convenience* are fulfilled.

Furthermore, a positive *attitude* towards the investigated application, a *high personal innovativeness* and *subjective norm* promote the consumers' acceptance. As the consumers demand an *added value*, the application should contain further functions next to the overseas health insurance (e.g. other situational short-term insurances, additional useful information). However, *technical issues* and existing *alternatives* can prevent the acceptance. Besides technology acceptance, *profitability*, *competition* and *saturation of the market* and the sales strategy (*marketing* and *collaboration with insurance agents*) are important critical success factors. In order to attract customers and to ensure the application's success, practitioners should pay attention to the mentioned results when planning to launch such an application in Germany.

After this thesis carried out a qualitative study to build theory for the new research area and to reveal influential factors for the technology acceptance of the mobile short-term overseas health insurance application, as a next step a quantitative empirical study should be performed to test the derived factors on a larger sample size. On the basis of this thesis' findings, an extended TAM can be set up and a questionnaire-based survey can be performed. In further research, it is also possible to perform a more in-depth analysis of single factors. An interesting aspect is, for instance, the willingness to pay. An investigation of the consumers' willingness to pay can help to set the price at an attractive level and therefore promote the application's use. Considering that risk aversion could neither be confirmed nor rejected as an influential factor for the application's technology acceptance, a further investigation of this factor may be recommendable for validation. As the results are only valid for younger consumers, a specific examination for older consumers should be conducted in the near future, as the experts confirm that age differences still exist. The performed study shows, that the probands demand an added value from the application. Therefore, further studies should investigate an application offering several short-term insurances for a situational use instead of an application offering only one insurance. Further added values, such as additional information or a medical bill submission, are also imaginable.

For mobile applications, there are many different usage possibilities for insurance companies, beyond contract conclusions. Next to the development of applications for consumers for the conclusion of simple short-term insurances, insurance companies could also use mobile applications via smartphone or tablet PC as a mobile Custom-

er Relationship Management (mCRM) for consultation sessions at the customer's place. With the help of a mCRM, information about customers and contracts can be retrieved easily and data can be recorded immediately at a customer appointment instead of transferring the data in the database afterwards. These and further functions of mCRM raise the productivity of the employees, the efficiency of processes and reduce the costs of customer management (cf. Forrester Consulting, 2009: 6; Manhart and Zimmermann, 2009: 156-157; Senger-Wiechers, 2011). Thus, insurance companies should check if the use of mobile applications by insurance consultants may also be reasonable.