

# **Influence Factors for Mobile Payment – An Empirical Study**

Masterarbeit

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# 1 Introduction

Every day the train passes a huge poster in the station hundreds of times. It says in large letters: “Paying is easy. Because all you need is your smart phone.” Mobile payment has arrived. It has arrived in everyday life and gets more and more attention. Whether in TV commercials or on huge billboards in the cities: The topic of paying mobile is everywhere. It is also hard to imagine conversations and discussions with friends, colleagues or family without this current topic. Somehow you always come back to the topic of Mobile Payment during your last holiday or shopping experience.

## 1.1 Relevance and Motivation

Smartphones have become an integral part of our lives. We always carry them with us and they can cover more and more functions. They have already replaced fixed phones and computers, MP3-players and cameras. For almost everything there is an app nowadays. In our digital age they provide us anywhere and anytime with everything we need and have become a daily companion. They have become indispensable for nearly everyone (see Lin et al. (2018), p. 1442f.). So why should we not use them for payment, too and have them replace our wallet next? The solution is Mobile Payment. Generally, it is defined as “payment for goods and services with a smartphone and without cash” (PWC (2017), p. 3). But are German users ready for this revolutionary and innovative new payment method?

The topic of Mobile Payment is not really new. It was already present in the early 2000. Now, in 2018 it seems to have arrived in Germany. But why has it taken until today? According to PWC’s latest population survey from 2017, 72 % of the participants still prefer cash as their payment method. In a global and European comparison, Germany is quite old-fashioned. At the same time there will be 62 million smartphone users until 2021 and the numbers show that there is also an interest in innovative payment methods. On top of this the potential for Mobile Payment increased to a huge potential of 55 % in the last years (see PWC (2017), p. 8ff.).

These figures make clear how important it is to understand why users, who represent the key to acceptance and adoption, are willing to use Mobile Payment or not, why it is such a controversial topic whose acceptance cannot be taken for granted and needs further research. This master thesis aims exactly at finding this out.

## 1.2 Research Objective, Question and Structure

In the last years, Mobile Payment was a topic of high importance among many organizations and researchers. Many parties, in research as well as in practice, deal with this current topic and try to understand and find out why users accept and adopt this innovative payment method or not. There is a lot of information on this subject, which can be found almost everywhere, for example on the Internet, in magazines and journals or in specialist literature.

To provide an overview of vast literature as well as compare it to a practical view, this thesis aims to provide further insight into the topic of Mobile Payment by answering the following research question:

### **Which different factors influence the intention to use Mobile Payment and how?**

This defined research question will be answered in the eight chapters of this thesis. Chapter two provides the theoretical background of the topic. It consists of definitions, the most important basic information concerning Mobile Payment, its underlying technology, the involved parties and finally a detailed literature review. Chapter three introduces the underlying research model that is used for the empirical part of the thesis by developing a series of hypotheses indicating how different factors affect the intention to use Mobile Payment. These hypotheses are based on the results of the literature analysis and represent the verified factors of influence. In chapter four, the quantitative research is realized and described in detail. It includes the research design of the conducted online survey, the evaluation of the raised data and the results. Chapter five provides the discussion of the findings of the theoretical and practical research done in chapters two and chapter four and the answer to the research question. The aim is to build a final model showing which factors influence the adoption of Mobile Payment. In this final model, the factors, represented by constructs, arise from the findings of the detailed literature review and the empirical study. In this thesis, the literature review shows the theoretical side and the empirical study represents the practical side. Chapter six then introduces a set of limitations of this thesis. Finally, chapter seven presents recommendations for research and practice and chapter eight summarizes the thesis and provides a conclusion.

## 8 Conclusion and Outlook

The purpose and objective of this master thesis was to investigate and identify factors that influence the intention to use Mobile Payment. For this purpose, first a theoretical overview of the topic was given and then 14 influencing factors were identified with the aid of a theory-based literature analysis. These 14 influencing factors were then converted into hypotheses and graphically presented using a research model. Next, the identified factors were queried and tested on the basis of a quantitative user survey. The results were evaluated using the Smart-PLS software. The user survey identified five factors as influencing the intention to use Mobile Payment. A clear and successful answer could therefore be found to the research question as to which factors have an influence on the intention to use Mobile Payment and how. As an overall and final finding, the five factors “Usefulness / Performance Expectancy”, “Security”, “Cost”, “Experience / Knowledge” and “Speed” influence the users’ intention to use Mobile Payment and thus as a confirmed consequence also the actual Mobile Payment use.

The results and the knowledge gained in this thesis can be used as a basis for further research in the field of Mobile Payment. Future research should focus above all on the unconfirmed factors and find out why these factors were not confirmed as expected. The two socio-demographic factors age and gender could help to find out whether they influence the intention to use Mobile Payment and whether users of different age groups or different sexes perceive other factors as influencing. In addition, a comparison with other countries and the local influence factors could also be helpful and provide a broader and more general view of the issue. This can help to get a general understanding of factors that influence the users of Mobile Payment and to investigate and understand them independent of cultural differences.

All these results reaffirm the importance of users and their needs in the entire Mobile Payment process. Without them no successful implementation of Mobile Payment as a payment method would be possible. In general, Mobile Payment can be revolutionary in Germany and will become widespread if the important and influencing factors are taken into account by all parties involved in the financial world.

In summary it can be said that the literature, experts and most users agree that Mobile Payment by smartphone is the future of payment in Germany as well. Germany is on the right track, but how long the nationwide and successful implementation will take remains to be seen.