



Torsten J. Gerpott & Phil Meinert

**Who signs up for NFC mobile payment services?
A behavioral analysis of mobile network operator subscribers in Germany**

Work in Progress # 162

June 2017

Abstract

Work in Progress # 162

www.zftm.de

Who signs up for NFC mobile payment services? A behavioral analysis of mobile network operator subscribers in Germany

Near field communication (NFC) mobile payment systems (MPS) enable customers to use their smartphones for over-the-counter payments instead of cash or magnetic strip cards. To date, worldwide the use of NFC MPS is still a niche application but, at the same time, it is growing quickly. Research exploring how NFC MPS users differ from non-users is scarce and mostly limited to future behavioral intentions instead of actual use behaviors. Therefore, the present study explores how 677 real NFC MPS users of the German business unit of a large mobile network operator differ from 677 non-users in terms of socio-demographic and mobile-device characteristics, mobile communication behaviors and the availability of merchants with NFC terminals in the neighborhood of their place of residence. NFC

MPS users were likely to be male and older subscribers who were equipped with a larger-screen smartphone, generated higher mobile Internet traffic, held a music streaming service subscription, paid lower monthly bills for mobile communication services and lived in a residential area with a higher number of merchant NFC terminals. Furthermore, we shed light on how use predictors are related to the timing of subscribers' NFC MPS use starts. Early users tended to be equipped with a highly-priced smartphone whose display screen was nevertheless smaller, used a music streaming service and generated lower monthly communication service bills. Implications for practitioners and scholars are drawn from the results.



**Univ.-Prof. Dr.
Torsten J. Gerpott**

Chair of Corporate and Technology Planning, Mercator School of Management, University Duisburg-Essen, Lotharstr. 65, D-47057 Duisburg.



**Dipl.-Wirt.-Chem. Phil
Meinert**

Research assistant at the Chair of Corporate and Technology Planning, Mercator School of Management, University Duisburg-Essen, Lotharstr. 65, D-47057 Duisburg.

© 2017

Contents

Abstract	3
1. Introduction	6
2. Background: Variants of mobile payment systems	8
3. Literature review and research hypotheses	10
// 3.1 Review of extant NFC payment use research	10
// 3.2 Research hypotheses and questions	10
4. Methods	15
// 4.1 Sample generation	15
// 4.2 Variable measurements	15
// 4.3 Statistical procedure	20
5. Empirical results	21
6. Discussion and implications	25
References	27