University of Augsburg

Faculty of Business and Economics

Chair for Value Based Marketing

Prof. Dr. Michael Paul

Supervisor: Janina Kleine

Universität Augsburg University

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Determinants of Mobile Channel Use:

A Literature Review and Conceptual Framework

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Johannes Ströbele

86159 Augsburg

Bachelor iBWL

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List of Abbreviations

$	United States dollar
APCI	perceived characteristics of innovations framework
App	application
DOI	diffusion of innovation
e.g.	exempli gratia - example given
i.e.	id est - in other words
GPS	global positioning system
IDT	innovation diffusion theory
IS	information system
M	mobile
MC	Mobile channel
MMS	multimedia messaging service
p.	page
PDA	personal digital assistant
RFID	radio frequency identification
SMS	short message service
TAM	technology acceptance model
TPB	theory of planned behavior
TRA	theory of reasoned action
U.S.	United States
UTAUT	unified theory of acceptance and use of technology
UTAUT2	extended unified theory of acceptance and use of technology
VAM	value-based adoption model

1 Introduction

Driven by the ever-growing competition in our global economy, companies continuously seek out to get in contact with customers. These connections between companies and consumers can be referred to as marketing channels, such as the store, internet, and catalog channel(Ansari et al. 2008, Verhoef et al. 2015). In academia as well as business already considerable research in is devoted to several channels (Neslin et al. 2006, Verhoef et al. 2015, Watson IV et al. 2015).

In recent years, the mobile channel (MC) emerged, which links firms and consumers through mobile devices such as smartphones (Pihlström 2007, Verhoef et al. 2015). This channel consists of various sub channels such as applications, messages, and websites (Andrews et al. 2016, Shankar and Balasubramanian 2009). One main reasons that makes this channel so unique is that it enables both parties to perform various activities anywhere and anytime (Pagani 2004, Shankar et al. 2010). For instance, searching for information, messaging, or shopping (Jih 2007 Shankar et al. 2010). Therefore, many consumers consider using the MC as an essential part of their daily life (Balasubramanian et al. 2002, Shankar et al. 2010, Shankar and Balasubramanian 2009). From a company perspective, the MC not only enables interaction with consumers, but also provides an opportunity for individuals to start the interaction by themselves (Shankar et al. 2010). Several scientists point out that the development of mobile telecommunication technologies (e.g. third or fourth generation), wireless local area network, and new mobile devices (e.g. tablets, smartphones) as the key technological triggers (Bart Larivière et al. 2013, Kumra et al. 2014, Wang et al. 2015).

An estimation of eMarketer (eMarketer 2014) indicated that 3.82 billion of the world's population will use the internet in 2018 and 72% of them will access it through a M phone. AgilOne (AgilOne 2015) analyzed data of 10.9 million users, which revealed that 22% of the shoppers migrated from offline to the online or mobile channel and 28% of the users migrated from the online or mobile channel to buy offers in the store. Furthermore, the global mobile advertising (ad) spending will account for $101.37 billion in 2016, which represents 50% of the total digital ad spending (eMarketer 2015).

Most literature about the factors of MC use draws from research about information system (IS) acceptance (Nysveen et al. 2005, Slade et al. 2015, Wu and Wang 2005) and innovation adoption (Kapoor et al., 2014 Pagani, 2004). The technology acceptance model (TAM) (Davis 1986), the innovation diffusion theory (IDT) (Moore and Benbasat 1996, Rogers 2003), and the unified theory of acceptance and use of technology (UTAUT) (Venkatesh et al. 2012, 2003) were frequently used by the scientists. I note that current literature puts only little emphasis on studying the MC in general. However, many articles investigated the use of various MC sub channels such as M websites that enable M commerce (Ko et al. 2009, Slade et al. 2015). Other focus on M messages for communication (Kim et al. 2008, Reichhart et al. 2013) and M applications (apps) (e.g. news) (Andrews et al. 2016, Hoehle and Venkatesh 2015).

Several researchers (Bart Larivière et al. 2013, Ko et al. 2009, Shankar and Balasubramanian 2009) call for a framework that condense the various M sub channels and integrates consumer- as well as company-related determinants of MC use. The reason for this is that many articles solely emphasis consumer-related factors, such as usefulness, ease of use and enjoyment (Lu et al. 2005, Nysveen et al. 2005, Pagani 2004, Wu and Wang 2005). Further, personal characteristics, context-specifics, and individual variables received some attention (Lu et al. 2005, Slade et al. 2015). In contrast, only little research exists that examines company-related factors. I state that the multichannel literature may give guidance for future studies in MC field of study. For instance, channel eliminations as a strategy to affect consumers' channel choice (Konuş et al. 2014). Further, Neslin and Shankar (2009) raised the question if customers "should be right channeled". This quote indicates that firms may dissatisfy consumers with coercive actions (e.g. elimination) and loose them to competitors.

As the recent literature is highly fragmented, I develop a conceptual framework that incorporates the different sub channels into one MC. Beyond that, I combine determinants and create new ones to provide a more holistic framework. I note that it contains consumer as well as company factors that affect MC usage. The aim of this article is to find the company- and consumer-related factors that impact the probability of consumers to use an MC.

This article is structured as follows. The second section defines the key terms and outlines research about consumer- as well as company-related determinants. In the third section, I develop my conceptual framework by giving an overview of these factors. Next, I describe each of the chosen determinants, give the theoretical rationale, and propose my hypotheses. The fourth section deals with my suggestions for further research and managerial recommendations. Finally, the paper presents the limitations of my study and summarizes the key findings.

2 Definitions and Existing Research on Mobile Channel Use

This section is divided into two parts. The first sub section defines the all the different definitions that are necessary to understand literature about MC use. I begin by examining the characteristics of mobile devices and develop a definition of the general term MC as well as the dependent variable MC use. Afterwards, my paper states the different sub channels of MC as well as its main functions. The second sub section outlines the current research of MC use. Further, I present the main theories, determinates, and findings about usage from a consumer as well as company view.

2.1 Definitions

Characteristics of Mobile Devices

Most advantages of MC derive because of the characteristics of mobile devices. But what makes these devices so unique? Such devices are mobile phones, smartphones, tablets, personal digital assistants (PDAs), and laptops (Bart Larivière et al. 2013, Kukulska-Hulme et al. 2009). In literature, most articles focus on personal, portable, networked, converged, and textual/visual characteristics of a M device (Bart Larivière et al. 2013, Shankar and Balasubramanian 2009, Wang et al. 2015).

First, the M device is personal, because it belongs only to one individual, contains a great amount of private data, and represents an important part of consumers' life (Bart Larivière et al. 2013, Wang et al. 2015). Second, the portable nature enables users to take their devices anywhere and use them at any time (Shankar and Balasubramanian 2009, Wang et al. 2015). Third, the networked device facilitates consumers to instantly connect to anybody and any offer of the firm (Bart Larivière et al. 2013). This is possible

due to a wireless connection or a mobile network. Fourth, the converged characteristic describes the various technologies that are included into one mobile device (Bart Larivière et al. 2013). This characteristic provides different functions and offerings to consumers. Fifth, the textual/visual nature extends the auditory and textual communication of telephones with pictures and videos (Bart Larivière et al. 2013).

Mobile Channel

In academia about MC, Pihlström (2007) presents a MC definition that focuses solely on services. In contrast, another description concentrates on entertainment services and products (Becker 2005). My topic needs a comprehensive definition to capture the various functions and subchannels of the MC. Therefore, I present my findings about the various definitions about MC, marketing channel, and M devices as follows.

First, Shareff et al.(2016) states that distribution and communication are the two general functions of a MC. Distribution includes products, services, and information that can be traded via mobile devices (Jiao Xu et al. 2014, Kim et al. 2015, Nasco and Bruner 2008, Pagani 2004). Communication deals with types of advertising and Word-of-Mouth (WoM) marketing among others (Becker 2005, Pihlström 2007). Second, MC is described as a route (McCalley 1996) or contact point (Verhoef et al. 2015) that connects consumers and companies. Verhoef et al. (2015) mention that these connections are a sequence of either direct or indirect contact between the parties. Third, MC provides not only benefits for consumers, but also an opportunity for companies to connect with users anywhere and anytime (Bart Larivière et al. 2013, Shankar and Balasubramanian 2009, Wang et al. 2015).

Based on these findings, I propose the following definition of MC: A mobile channel is a route or a contact point that links companies with consumers anywhere and anytime for interactive communication (e.g. advertising) and distribution of products, services, as well as information through personal, networked, portable mobile devices.

MC Use

For my topic, it is crucial to examine the dependent variable use. One description of use is defined by Delone and McLean (2003). They describe use as “everything from a visit to a web site, to navigation within the site, to information retrieval, to execution of a transaction” (Delone and McLean 2003, p. 19). Another definition considers system use as a repeated behavior that “refers to the individual's actual direct usage of the given system in the context of his or her job” (Davis 1986, p. 25, Fishbein and Ajzen 1975, p. 353). Therefore, I make the distinction between the definition by Davis (1986, p. 25) and the meaning of my depended variable.

First, instead of a given system, I focus on MC as the usage target. Second, my article considers only the first use of a MC. A closer look at use reveals that many studies investigate predictors of usage such as behavioral intention or behavioral expectations (Sheppard et al. 1988, Taylor and Todd 1995, Warshaw and Davis 1985). Behavioral intention is defined as “formulate conscious plans to perform or not perform some specified future behavior” (Warshaw and Davis 1985, p. 2) and behavioral expectation as “estimation of the likelihood that he or she actually will perform some specified future behavior” (Warshaw and Davis 1985, p. 3). However, many researchers use behavioral intention interchangeably for both terms despite the efforts of Warshaw and Davis (1985). Therefore, my article integrates both constructs into the dependent variable of my topic. Third, I look at usage from a consumer and company perspective. This view emphasizes that firms need to understand the variables that determine consumers’ use of a MC as well as the actions they can take to influence this behavior. As a result, I define MC use as the consumers’ initial usage of the MC in a consumer and company context.

Sub Channels of the Mobile Channel

My research indicates the main routes that connect firms and individuals are M websites, M messages, and M applications (Andrews et al. 2016, Shankar and Balasubramanian 2009). I call them sub channels of the MC. Kalyanam and McIntyre (2002) state that M websites consist of browser-based HTML pages that are used to interact with customers. Further, a website has to effectively branded, present only essential content, provide appealing graphics, as well as be structured in a logical way (Hoehle and Venkatesh 2015).

M messages can be sent via short messaging service (SMS), the multimedia messaging service (MMS), and the mobile mail (Barwise and Strong, 2002; Bauer et al., 2005; Nasco and Bruner, 2008). These messaging channels enable individuals to communicate directly, personally, and immediately (Reichhart et al. 2013). According to Nasco and Bruner (2008) a SMS contains only text, which is limited to 160 characters. Further, they state that MMS is able to include text, images, audio, as well as video. Due to its newness, only few consumers and companies make use of MMS. M mail enables firms to incorporate text, image, video, and audio, because it supports the use of hypertext markup language (Reichhart et al. 2013).

M applications are defined as an "software artifact that is specifically developed for mobile operating systems installed on … devices, such as smartphones or tablet computers" (Hoehle and Venkatesh 2015, p. 3). They can be downloaded from a mobile marketplace (e.g. Google Play Store, Apple's App Store) or are preinstalled on the M device (Hoehle and Venkatesh 2015).

Functions of Mobile Channel

As stated by Shareef et al. (2016), the main functions of MC are distribution and communication. The first function, distribution deals with the monetary and non-monetary commerce of products (e.g. applications, eBooks), services (e.g. video streaming, cloud storage), and information (e.g. sports news, weather forecast) (Jiao Xu et al. 2014, Nasco and Bruner 2008, Pagani 2004). M commerce is considered by the majority of researchers as a part of electronic commerce (Chong et al. 2012, Ngai and Gunasekaran 2007). Many different definitions exist (Groß 2015, Kim et al. 2007, Wu and Wang 2005). I use the one of Chong et al. (2012, p. 2) who define mobile commerce as "any transaction, involving the transfer of ownership or rights to use goods and services, which is initiated and/or completed by using mobile access to computer mediated networks with the help of mobile devices". Ko et al. (2009) mention M banking, M shopping, and M auctioning as examples. Further, I note consumers that engage in M commerce with a company are referred to as mobile shoppers (Shankar et al. 2016).

For this article, I note that services are produced and consumed at the same time (Hoffman and Bateson 2016). In contrast, a product is first manufactured and

afterwards consumed. Concerning information, I point out its different functions that distinguish it from products and services. For example, consumers search for specific information like sport news, browse randomly through websites for fun, and compare products based on different sources (Shankar et al. 2016).

Apart from that, I note one innovative service, named location-based M services, because they were frequently discussed in research. They enable companies to detect the location of consumers and based on this information provide services such as navigation (Nysveen et al. 2005, Shankar and Balasubramanian 2009). The technologies that facilitate these services are the global positioning system (GPS) and the radio frequency identification (RFID) (Nysveen et al. 2005, Shankar and Balasubramanian 2009).

The second function, communication is defined as “a process in which participants create and share information with one another in order to reach a mutual understanding” (Rogers and Kincaid 1981, p. 63). Furthermore, Shankar et al. (2016, p. 1) define M marketing as “the two-way or multi-way communication and promotion of an offer between a firm and its customers using a mobile medium, device, or technology”.

One of the most discussed types of communication is M Advertising, which Shankar et al. (2010) describes as a M medium that convinces consumers of the product and image of a retailer. Based on my literature research, I note that M advertising can be carried out via M messages, M websites, and M applications (Andrews et al. 2016, Shankar and Balasubramanian 2009). Companies use these contact points to convince their audience from the brand immediately and directly (Reichhart et al. 2013). The most common types are permission, incentive, or location based M advertising.

Shankar et al. (2010) states that M display advertisements enable firms to empathize the benefits of products or services with videos and pictures. I describe permission based M ads as content that is only distributed to a consumer that agreed to receive them (Tsang et al. 2004). Such advertising actions often prove to be superior, because traditional mass M advertising annoys or confuses consumers (Karjaluoto et al. 2008).

I describe location based M advertising as ads that use the location of consumers in an interactive way to convince consumers of the offers (Gao et al. 2013, Shankar and Balasubramanian 2009). Incentive based M ads provide rewards to consumers who will receive advertisements in return (Tsang et al. 2004). Another highly studied M advertising type is M couponing. Dickinger and Kleijnen (2008) state that such coupons can consist of text, pictures, audio, and videos. Companies distribute these coupons to consumers. They can later redeem them in order to receive benefits such as discounts (Dickinger and Kleijnen 2008, Reichhart et al. 2013).

M WoM marketing is another kind of communication. WoM is defined as “all informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services or their sellers” (Okazaki 2008, p. 2). Therefore, I consider M WoM as communication that aims at influencing consumers’ attitude to the company.

2.2 Existing Research

My review revealed that the relationship between determinants and MC use is mainly grounded in IS and multichannel literature. “IS research has long studied how and why individuals adopt new information technologies” (Venkatesh et al. 2003, p. 3). Regarding the determinants of IS usage much literature exists (Agarwal and Prasad 1998, Davis 1993, Karahanna et al. 1999, Moore and Benbasat 1996, Rogers 2003, Venkatesh et al. 2012). Also, multichannel literature put high emphasis on investigating the factors that influence channel choice (Neslin et al. 2006, Thomas and Sullivan 2005, Trampe et al. 2014, Zettelmeyer 2000). Many MC researchers developed their own frameworks (e.g. VAM) (Kim et al. 2007) and adapted or extended existing IS theories (Kapoor et al. 2014, Karjaluoto et al. 2008, Pagani 2004, Slade et al. 2015).

Based on my findings, I propose that research can be divided into consumer and company streams. I use the term consumer research streams to describe the determinants that affect channel usage from a consumer perspective. On the other hand, I use the company research streams for company-related factors that influence usage. I present an outline of my findings in Table 1.

Table 1: Overview of Research Streams					
Consumer Research Streams				*Company Research Streams*	
TRA TAM TRB	IDT DOI	UTAUT UTAUT2	VAM APCI	System Characteristics	Channel Migration Strategies

Source: Own depiction

2.2.1 Consumer Research Streams

The first stream concerns theories about the individual acceptance of technology (TRA, TAM, TRB). They specify usage intention as the mediating variable and actual use as the independent variable. The second stream focuses on the association between perceived characteristics of innovations and IS adoption (DOI, IDT). Third stream includes theories which combine existing theories in order to create a more comprehensive framework of IS usage (UTAUT, UTAUT2). The last one introduces the value approach into the MC research by adding perceived value as the key predictor of usage (VAM, APCI). An outline of these streams is shown in Table 1.

My review revealed that the fundamental TRA, TAM, TRB, DOI, IDT, and UTAUT deal with IS usage in the job context and were adapted to fit into the MC use from a company and consumer perspective. In contrast, the extended UTAUT (UTAUT2) (Venkatesh et al. 2012), VAM (Kim et al. 2007), and an adopted perceived characteristics of innovations framework (APCI) (Kleijnen et al. 2007) were specially developed for studying MC use in consumer context.

First consumer research stream

Table 2: TRB (TRA) Definitions	
Determinant	*Definition*
Attitude toward behavior	"The degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (Ajzen 1991, p. 10).
Subjective norm	"The "perceived social pressure to perform or not to perform the behavior" (Ajzen 1991, p. 10).
Perceived behavioral control	"The "perceived ease or difficulty of performing the behavior and it is assumed to reflect past experience as well as anticipated impediments and obstacles"(Ajzen 1991, p. 10).

Source: (Ajzen 1991, Fishbein and Ajzen 1975)

The first consumer research stream has its roots in TRA. It deals with the effect of subjective norm and attitude toward behavior on the mediator behavioral intention as well as the impact of behavioral intention on the actual behavior (Ajzen and Fishbein 1980). Table 2 shows the basic definitions of TRA and TRB. In MC use context, several studies emphasized the importance of subjective norm (Dickinger and Kleijnen 2008, Nysveen et al. 2005, Zhang and Mao 2008) and attitude toward behavior (Gao et al. 2013, Nysveen et al. 2005).

The theory of planned behavior (TPB) adds perceived behavioral control to TRA, because often internal and external factors (e.g. time, cost) limit individuals' usage control of IS (Ajzen 1991). Some MC literature focuses on this determinant (Dickinger and Kleijnen 2008, Karjaluoto et al. 2008). Karjaluoto et al. (2008) found a significant, but low support for the impact of this behavioral control on MC use.

Table 3: TAM Definitions

Determinant	*Definition*
Perceived usefulness	"The degree to which an individual believes that using a particular system would enhance his or her job performance" (Davis 1986, p. 26).
Perceived ease of use	"The degree to which an individual believes that using a particular system would be free of physical and mental effort" (Davis 1986, p. 26).

Source: (Davis 1986)

Davis (1986) used the TRA to develop TAM, which received high attention in IS research (Agarwal and Prasad 1998, Venkatesh et al. 2003). The TAM examines the way IS use is affected by perceived usefulness and perceived ease of use (Davis 1993). The description of both determinants is presented in Table 3. Ajzen (1991) stated the link between perceived ease of use and perceived behavioral control. This is because both factors reflect anticipated obstacles and past experiences.

My research reveals that perceived usefulness is the most discussed determinant of MC use (Chong et al. 2012, Hong and Tam 2006, López-Nicolás et al. 2008, Lu et al. 200, Nysveen et al. 2005, Pagani, 2004). Ease of use received also a widespread awareness (Gao et al. 2013, Guo et al. 2012, López-Nicolás et al. 2008, Nysveen et al. 2005, Pagani 2004). Nysveen et al. (2005) found out that usefulness and ease of

use are positively influencing usage of mobile services. Furthermore, Gao et al. (2013) supported the positive association between both determinants and mobile marketing acceptance.

However, some articles pointed out the limited predictive capacity of the basic TAM (Agarwal and Prasad 1998, Venkatesh et al. 2003). Davis (1993) indicated that determinants other than perceived usefulness and ease of use needed to be added to the TAM. Besides, the lack of internal and external constraints, opinions about new technologies, and individual characteristics were stated a lot (Agarwal and Prasad 1998). Therefore, many articles extent the TAM.

The most important additional determinant of the TAM is perceived enjoyment, which was founded by Davis et al. (1992). He defined enjoyment in the job context as “the extent to which the activity of using the computer is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated“ (Davis et al. 1992). This construct is derived from the “Hierarchical Model of Intrinsic and Extrinsic Motivation” by Vallerand (1997, p. 3).

Davis et al. (1992) mentioned perceived enjoyment as intrinsic motivation and perceived usefulness as extrinsic motivation. In literature about MC use, much research is devoted to enjoyment (Hong and Tam 2006, John A Aloysius et al. 2016, Nysveen et al. 2005, Pagani 2004). For example, the construct was found to have a significant positive impact on using experiential mobile services (Nysveen et al. 2005).

Many studies extended the TAM with other determinants of MC use (Chong et al. 2012, Palka et al. 2009, Wu and Wang 2005). For instance, Chong et al. (2012) observed that the determinant cost is negatively associated with M commerce adoption for young Malaysian consumers. In addition, researchers studied the relationship between trust and use (Chong et al. 2012, Karjaluoto et al. 2008, Lee et al. 2015, Palka et al. 2009, Zhang and Mao 2008). Karjaluoto et al. (2008) reported that trust is positively related to the intention to receive messages. Another article discussed the effect of social influence on consumers’ MC choice (Chong et al. 2012, Hong and Tam 2006, López-Nicolás et al. 2008, Lu et al. 2005). The relationship between opinion of other people and wireless internet services has been observed by Lu et al. (Lu et al. 2005). I note

that the term wireless has a slightly different meaning than mobile, but point out that the article of Lu et al. (Lu et al. 2005) refers also to mobile services.

Second consumer research stream

Table 4: IDT (DOI) Definitions	
Determinant	*Definition*
Relative advantage	"The degree to which an innovation is perceived as being better than its precursor" (Moore and Benbasat 1996, p. 4, Rogers 2003, p. 17).
Image	"The degree to which use of an innovation is perceived to enhance one's image or status in one's social system" (Moore and Benbasat 1996, p. 4).
Compatibility	"The degree to which the innovation is perceived as consistent with the existing values and past experiences of the potential adopter" (Moore and Benbasat 1996, p. 8).
Ease of use	"The degree to which an individual believes that using a particular system would be free of physical and mental effort" (Davis 1986, p. 26; Moore and Benbasat 1996, p. 6).
Complexity	"The degree to which an innovation is perceived as difficult to understand and use" (Rogers 2003, p. 17).
Trialability	"The degree to which an innovation may be experimented with on a limited basis" (Moore and Benbasat 1996, p. 4, Rogers 2003, p. 17).
Visibility	"The degree to which the innovation is visible in the organization" (Moore and Benbasat 1996, p. 25).
Result demonstrability	"The more "amenable to demonstration the innovation is, and the more visible its advantages are the more likely it is to be adopted" (Moore and Benbasat 1996, p. 12).

Source: (Moore and Benbasat 1996, Rogers 2003)

The second stream deals with the adoption of IS. The innovation diffusion theory (IDT) is the most relevant theory in this field (Moore and Benbasat 1996). It is based on the diffusion of innovation (DOI) process by Rodgers (2003). Moore and Benbasat (1996) redefined Rogers' perceived attributes of innovations to study the impact of individual perceptions on the use of various ISs (Rogers 2003). They found seven characteristics: relative advantage, image, compatibility, ease of use, trialability, visibility, and result demonstrability. The associated definitions are shown in Table 4. Several IS researchers reported that these attributes significantly predict IS use (Karahanna et al. 1999, Moore and Benbasat 1996, Venkatesh et al. 2003).

Moore and Benbasat (1996) stated the similarity between relative advantage (Rogers 2003) and perceived usefulness (Davis 1986). Further, they introduced image by separating it from relative advantage (Moore and Benbasat 1996, Rogers 2003). Complexity was replaced by ease of use (Davis 1986, Moore and Benbasat 1996, Rogers 2003). I exclude trialability, because a person who tested a MC, already used it for the first time. Moreover, they found that observability lacks reliability (Moore and Benbasat 1996). Therefore, they developed the result demonstrability and visibility. I excluded the result demonstrability from my research, because my study does not focus on the job context.

Many MC articles investigated innovation usage based on perceived innovation characteristics (Kapoor et al. 2014, Kim and Ammeter 2014, Mallat 2007, Wu and Wang 2005). Kapoor et al. (2014) supported the positive influence of relative advantage, and compatibility on intention to the adoption M payment services in India. Nevertheless, a positive impact of image and visibility was not confirmed (Kapoor et al. 2014). One study revealed that there is a positive and direct relation between compatibility and actual use of M commerce apps (Wu and Wang 2005).

Many researchers discussed innovativeness as a factor that describes the different user segments along the diffusion of innovations process (Goldsmith and Hofacker 1991, Lam and Shankar 2014, Rogers 2003). MC literature is also concerned with the influence of innovativeness (Gao et al. 2013, Lu et al. 2005, Pagani 2004, Shankar et al. 2010). For instance, one article about mobile multimedia services divided consumers into segments of innovators, early adopters, early majority, late majority, and laggards (Pagani 2004). Gao et al. (2013) found support for a positive relation between innovativeness and consumers' attitude toward M marketing.

Several studies extended the IDT with new determinants (Kapoor et al. 2014, Mallat, 2007). Kapoor et al. (2014) discussed social approval, riskiness, and cost. They confirmed the positive influence of social approval on mobile payment service. However, only cost supported a negative effect in contrast to riskiness. Another article investigated the impact of perceived risk (e.g. security), trust, cost, as well as network

externalities and critical mass on mobile payment adoption with focus group interviews (Mallat 2007).

Third consumer research stream

Table 5: UTAUT2 (UTAUT) Definitions	
Determinant	*Definition*
Performance expectancy	"The degree to which using a technology will provide benefits to consumers in performing certain activities" (Venkatesh et al. 2012, p. 3).
Effort expectancy	"The degree of ease associated with consumers' use of technology" (Venkatesh et al. 2012, p. 3).
Social influence	"The extent to which consumers perceive that important others (e.g., family, friends) believe they should use a particular technology" (Venkatesh et al. 2012, p. 3).
Facilitating conditions	"The consumers' perceptions of the resources and support available to perform a behavior" (Venkatesh et al. 2012, p. 3).
Hedonic motivation	"The fun or pleasure derived from using a technology" (Venkatesh et al. 2012, p. 5).
Price value	"The consumers' cognitive tradeoff between the perceived benefits of the applications and the monetary cost for using them" (Venkatesh et al.,2012, p. 5).
Habit	"The extent to which an individual believes the behavior to be automatic" (Venkatesh et al. 2012, p. 5).

Source: (Venkatesh et al. 2012, 2003)

The third research stream consists of theories that combine different models. As the main reason for developing the UTAUT, Venkatesh et al. (2003) mentioned the limited predictive capacity of earlier theories (e.g. TAM, IDT). The theory combined eight theories such as TAM, TRA, TPB, and IDT in order to study the usage of new information technologies in a job context (Venkatesh et al. 2003). Performance expectancy, social influence, facilitating conditions, and effort expectancy indirectly influence actual use mediated through the predictor behavioral intention. Further, behavioral intention and facilitating conditions directly affect usage (Venkatesh et al. 2003). Table 5 presents the definition of these determinants. Venkatesh et al. (2012) extended the UTAUT to examine mobile internet technology use in a consumer context. They empirically tested the effect of the additional constructs hedonic motivation, habit, and price value on behavioral intention. I excluded habit from my research, because my focus is the first use.

In current research, several articles used the UTAUT to study MC usage (Luo et al. 2010, Nysveen and Pedersen 2014, Slade et al. 2015, Venkatesh et al. 2012). Sufficient support was found for the positive influence of performance expectancy, social influence, facilitating conditions, effort expectancy, hedonic motivation, habit, and price value (Venkatesh et al. 2012). In addition, the positive impact of performance expectancy, effort expectancy, social influence, and facilitating conditions on intention to use RFID-enabled M services was reported by Nysveen and Pedersen (2014).

Some researchers presented additional constructs for the UTAUT (Luo et al. 2010, Nysveen and Pedersen 2014, Slade et al. 2015). Luo et al. (2010, p. 2) stated perceived risk, disposition to trust, self-efficacy, disposition to trust, “trust belief”, and perceived risk. They discovered a positive impact of disposition to trust and self-efficacy on the behavioral intention to adopt wireless banking. Moreover, a negative impact of perceived risk on behavioral intention was found (Slade et al. 2015).

Fourth consumer research stream

The last stream studies the use from a value perspective. Various fields of study (e.g. marketing, finance) are concerned with the investigation of value (Kim and Hwang 2012, Kleijnen et al. 2007). Many literature is devoted to the value of products (Chen and Dubinsky 2003, Dodds et al. 1991, Zeithaml 1988) and services (Bolton and Drew 1991, Brady et al. 2005, Cronin Jr. et al. 2000).

Zeithaml‘s highly cited model (Zeithaml 1988) examines the determinants that affect product purchase with perceived value as the key mediating variable. She defined perceived value as “the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given” (Zeithaml 1988, p. 14). It proposed products’ lower-level (e.g. functional benefit) and higher-level (e.g. emotional payoff) attributes as the main factors of perceived value (Zeithaml 1988).

Another article studied the impact of perceived value on purchase intention in an e-commerce context. They conducted a survey which found support for the influence of product quality, product price, and valence of experience (i.e. emotional state) on perceived customer value. Also, they reported a positive relation between value and purchase intention (Chen and Dubinsky 2003).

In literature, some articles deal with perceived value as the key predictor of MC use (Kim et al. 2007, Ko et al. 2009, Turel et al. 2007). Kim et al. (2007) developed the value-based adoption model (VAM), which combines the TAM (Davis 1986), and several value theories (Chen and Dubinsky 2003, Dodds et al. 1991, Zeithaml 1988).

Kim et al. (2007) proposed perceived usefulness and enjoyment as components of perceived benefits as well as technicality and perceived fee as components of perceived sacrifices. A stronger impact of sacrifices than benefits was found. Furthermore, a positive influence of benefits and sacrifices on perceived value was reported (Kim et al., 2007).

Kleijnen et al. (2007) proposed the APCI based on the DOI (Rogers 2003) and value articles (Bolton and Drew 1991, Brady et al. 2005) . The paper (Kleijnen et al. 2007) found out that benefit and cost influence the perceived value. In contrast to the study of Kim et al. (2007), they discovered a positive relationship between perceived value and intentions to use mobile brokerage services (Kleijnen et al. 2007).

2.2.2 Company Research Streams

First of all, I note the lack of research literature about company-related in comparison to consumer-related determinants of MC use. I subdivide the company research streams as follows. The first stream emphasizes the effect of various system characteristics (e.g. channel design, channels structure) on usage. The second stream focuses on the strategies that firms can implement in order to move consumers from one to the other channel. Consequently, I present an overview of the company research streams in Table 1.

First company research stream

My research exposed that several IS researchers studied the impact of system characteristics or attributes on IS (e.g. channels) usage in the workplace (Davis 1993, Delone and McLean, 2003, Lucas and Nielsen 1980, Venkatesh and Bala 2008, Venkatesh and Ramesh 2006). Venkatesh and Bala (2008, p. 4) described system characteristics as “salient features of a system that can help individuals develop favorable (or unfavorable) perceptions regarding the usefulness or ease of use of a

system". Further, it is described as an external stimulus that enables companies to affect IS use (Venkatesh and Bala 2008).

The relationship between system characteristics and actual use was investigated among others (Venkatesh and Bala 2008). They reported a positive impact of the systems' ability to accomplish certain task, named output quality, led to higher levels of perceived usefulness. In contrast, a positive impact of usability from an objective perspective on perceived usefulness was not supported (Venkatesh and Bala 2008)

Delone and McLean (2003) discussed the variables that affect customers' and suppliers' use of e-commerce applications. They proposed the determinants system quality (e.g. usability, reliability, availability), information quality (e.g. relevant content, personalized content, secure content), and service quality (e.g. empathy and responsiveness) (Delone and McLean 2003).

Today, a few articles about the relation between MC characteristics and usage exist (Hoehle et al. 2015, Hoehle and Venkatesh 2015, Kim and Hwang 2012, Venkatesh and Ramesh 2006). Some researchers found support for the impact of usability on continued intention to use a M app and on consumers' loyalty (Hoehle and Venkatesh 2015). M app usability is defined as "the extent to which a mobile application can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use" (Hoehle and Venkatesh 2015, p. 3). I included this paper although it is concerned with continued usage, because of several reasons stated in the main part.

Table 6: Value Tendencies Descriptions

Determinant	*Definition*
Utilitarian tendency	"Mobile user's preference to use mobile services which have more functional and economically meaningful values such as mobile shopping, mobile banking, news etc. (Kim and Hwang 2012).
Hedonic tendency	The preference to use mobile services which provide the emotional or psychological worth such as mobile chatting with friends, mobile games, sports, and mp3 music play (Kim and Hwang 2012).

Source: (Kim and Hwang 2012)

The article of Kim and Hwang (2012) investigated the effect of perceived information, design, and connection quality on the utilitarian tendency and hedonic tendency to frequently use mobile internet services (Kim and Hwang 2012). Table 6 presents the definitions of the value tendencies. They mentioned that these perceived values can occur both at the same time during the use of mobile internet services (Kim and Hwang 2012).

Second company research stream

The last stream deals with channel migration strategies that aim at moving consumers to the MC from another channel (Trampe et al. 2014). My literature review about their impact on usage revealed that no IS articles, but many multichannel paper exist concerning this topic (Ansari et al. 2008, Konuş et al. 2014, Trampe et al. 2014). Ansari et al. (2008) studied the impact of migration strategies on channel selection and purchase volume in a multichannel context. They found that firms are able to convince consumers to migrate to another channel through e-mails and catalogs (Ansari et al. 2008).

Table 7: Channel Migration Strategies

Determinant	*Definition*
Forced migration	"The process of moving customers from one channel to the E-channel through coercive actions that enhance the efficiency of the firm's channel operations" (Trampe et al. 2014, p. 2).
Voluntary Migration	"Customers can choose among multiple, fully available channels" (Trampe et al. 2014, p. 1).

Source: (Trampe et al. 2014)

Especially, the multichannel article by Trampe et al. (2014), which investigated the impact of voluntary and forced migration strategies on choice of electronic channels. The associated definitions are provided in Table 7. Furthermore, they mentioned rewards (e.g. receiving a monetary advantage for using a channel) and punishments (e.g. higher price for channel usage) as counteracting methods to the negative impact of forced migration strategies. Among other findings, this paper reported eliminating a channel and punishing consumers for using an inefficient channel will lead to similar levels of dissatisfaction (Trampe et al. 2014).

Two articles concerned the switching behavior of mobile users (Ko et al. 2009, Ranganathan et al. 2006). Ranganathan et al. (2006) defined customer switching as “migration of users from one provider to another” (Ranganathan et al. 2006, p. 1). They found out that relational investments are factors which influence this behavior. For example, the more often an individual consumes a M service or the longer the relationship duration is with the customer, the lower is the probability for the consumer to switch companies.

Furthermore, Ko et al. (2009) discussed the importance of promotional strategies to convince consumers to engage in M commerce. For example, advertisements should be adapted to the individual consumer and clearly present the positive aspects of the offer. In addition, the communication should not only emphasize on the emotional, but also utilitarian advantages that the use of a MC creates.

3 Conceptual Framework: Determinants of Mobile Channel Use

This section deals with the development of a conceptual framework about the determinants that affect the usage of a MC. At first, I outline the framework by explaining the categorization of the consumer- and company-related determinants and their association with the dependent variable MC use. Afterwards, I state the constructs definitions, describe the theoretical rationale for impact of the determinants on MC use, as well as propose the hypotheses.

3.1 Overview of Framework

The literature review revealed that MC articles are mainly concerned with determinants that affect the use of a MC from a consumer as well as company perspective. Much literature discussed and tested empirically the relationship between consumer-related determinants and MC use (Hong and Tam 2006, Kapoor et al. 2014, Kim et al. 2007, Nysveen et al. 2005, Pagani 2004). In contrast, the association between company-related antecedents and MC usage received considerable less attention (Hoehle and Venkatesh 2015, López-Nicolás et al. 2008, Ranganathan et al. 2006). In accordance with my review, I group the determinants into consumer- and company-related category as shown in Figure 1.

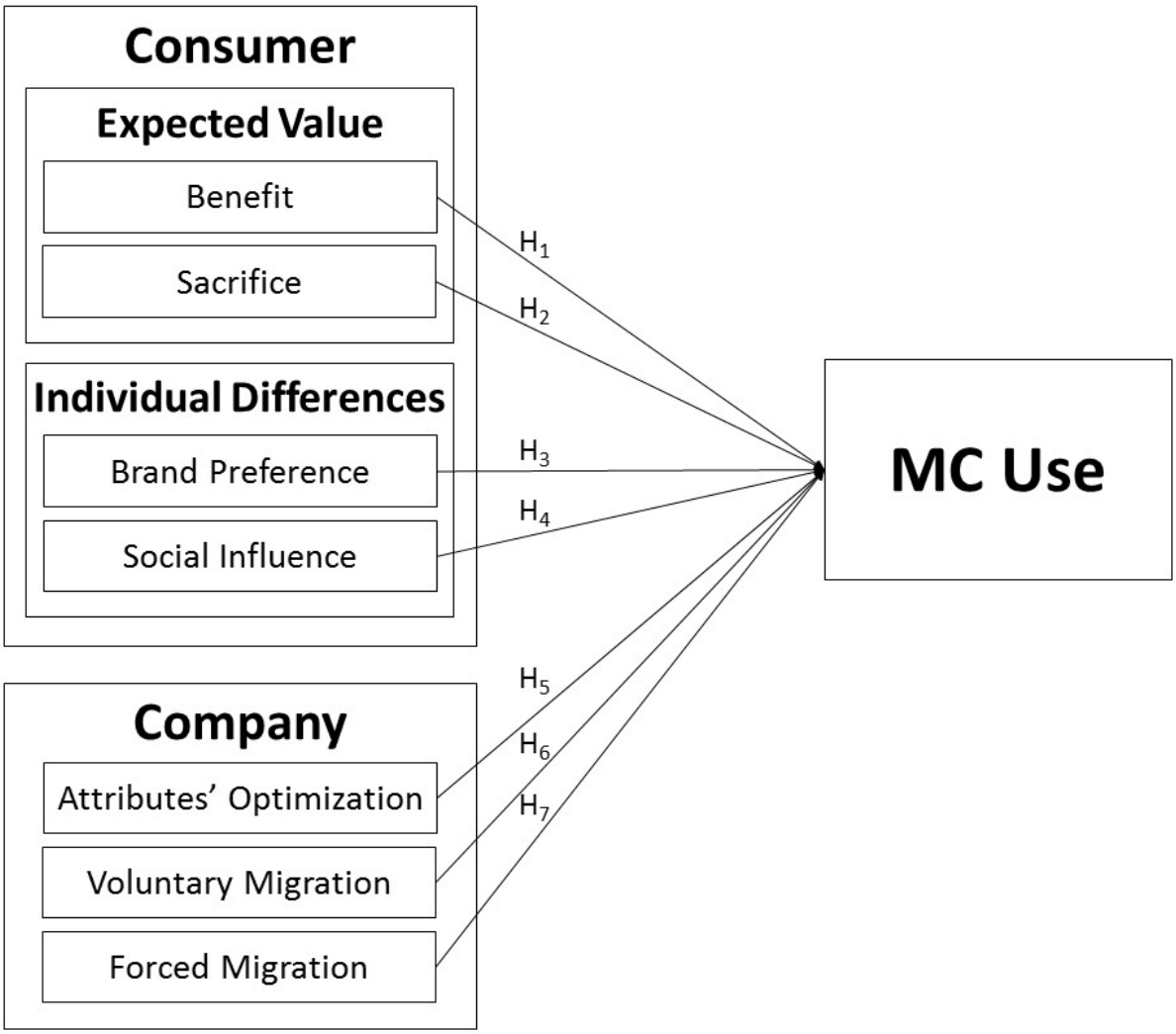

Figure 1: Framework of Determinants of Mobile Channel Use: Own depiction.

The consumer-related category is concerned with determinants that influence the probability of consumers to use a MC. It is further divided into the expected value of a MC and individual differences. Therefore, I developed and use the term expected MC value for two main reasons. I consider value as a more holistic concept than previous constructs. Value includes various positive and negative aspects of a MC (Kim et al. 2007, Kleijnen et al. 2007). In contrast, other factors such as perceived usefulness or perceived ease of use focus only on the benefits that are expected by using a MC (Chong et al. 2012, Hong and Tam 2006, Nysveen et al. 2005).

Further, I believe that expected value is more appropriate than perceived value (Kim et al. 2007, Kleijnen et al. 2007). This assumption is based on the expectation-confirmation theory that is adapted to IS use (Bhattacherjee 2001). Bhattacherjee

(2001) described expectations as consumer' beliefs that are formed prior to the actual use of an IS, whereby perceptions are created afterwards. Consequently, expected value is directly aimed at the expectations consumers have about using a MC for the first time. Kim et al. (2007, p. 2) described perceived value as "the trade-off between total benefits received and total sacrifices". This definition is consistent with the previously stated value definition (Zeithaml 1988, p. 14). Thus, I describe expected value as the estimated trade-off between benefit and sacrifice of using a MC.

Individual differences as a category is frequently discussed in IS (Agarwal and Prasad 1998, Davis 1986, Rogers, 2003) and MC literature (Gao et al. 2013, Kim and Hwang 2012, Ko et al. 2009). Clearly, every consumer is unique. In accordance, their various personal traits influence usage behavior. Some researchers pointed to demographics such as gender and age (Kim and Hwang 2012, Venkatesh et al. 2012). Others stated personality or lifestyle such as personal innovativeness, social influence, and brand trust (Chong et al. 2012, Gao et al. 2013, Nysveen and Pedersen 2014).

Several highly cited articles consider some of these constructs as moderators (Agarwal and Prasad 1998, Venkatesh et al. 2012). Consistently, I contemplate personal innovativeness (Agarwal and Prasad 1998), gender (Venkatesh et al. 2012), and age (Venkatesh et al. 2012) as moderators and exclude them from my framework. My framework includes social influence and introduces a new construct named brand preference in the individual differences category.

The other company-related category incorporates optimization of attributes, forced migration and voluntary migration. Improvement of channel attributes to increase the probability of consumers to use a MC received only limited research attention as indicated by my review (Hoehle et al. 2015, Hoehle and Venkatesh 2015, Kim and Hwang 2012). However, I justify the consideration of this determinant not only by referring to MC research but a considerable amount of IS literature that is devoted to this variable (Davis 1993, Delone and McLean 2003, Venkatesh and Bala 2008, Venkatesh and Ramesh 2006).

Second, this article introduces forced and voluntary migration as determinants of MC use. I derived these strategies from an article by Trampe et al. (2014). My review

revealed that only a few articles are concerned with the determinants of MC use. Furthermore, the paper that deal with this topic only provide limited insights into the influence of these factors on MC use (Dickinger and Kleijnen 2008, Ranganathan et al. 2006). In contrast, several multichannel researchers studied the way companies can implement forced and voluntary migration strategies that move consumers from on to another channel (Konuş et al. 2014, Montoya-Weiss et al. 2003, Trampe et al. 2014). Therefore, I mainly base my argumentation about the influence of channel migration strategies on MC use on multichannel literature.

3.2 Consumer Determinants

Benefit

In this article expected benefit is defined as the consumer's total estimation of what she/he will receive in order to use the MC. This description is based on the value definition by Zeithaml (1988, p. 14) and the perceived value definition by Kim et al. (2007, p. 2). In accordance with the argumentation of expected value, this paper draws from determinants that deal with expected or perceived benefits. I found two articles that investigated the impact of benefit as a category on MC use (Kim et al. 2007 Kleijnen et al. 2007).

Kim et al. (2007) proposed perceived enjoyment and usefulness of the TAM in the category benefits of their framework (Davis 1986, Davis et al. 1992). They considered perceived enjoyment as an intrinsic benefit and perceived usefulness as an extrinsic benefit based on research about intrinsic and extrinsic motivations and value (Davis et al. 1992, Vallerand 1997, Zeithaml 1988). The article supported the positive impact of perceived usefulness and perceived enjoyment on adoption of the mobile internet (Kim et al. 2007). Another article discussed time convenience, user control, and service compatibility as benefits (Kleijnen et al. 2007). Kleijnen et al. (2007) confirmed also the positive impact of time convenience and user control as benefits on perceived MC value of mobile brokerage services.

A vast amount of articles supported the positive influence of perceived usefulness and enjoyment on MC use (Hong and Tam 2006, Ko et al. 2009, López-Nicolás et al. 2008, Lu et al. 2005, Nysveen et al. 2005, Pagani 2004). Lu et al. (2005) discovered that the more useful mobile services are for consumers, the higher is the probability of usage.

A positive effect of perceived usefulness and enjoyment on use of M services was found by Nysveen et al. (2005). The positive association between these variables and mobile multimedia services was also supported (Pagani 2004). Furthermore, Hong and Tam (2006) figured out that higher levels of both factors lead to a higher likelihood to use mobile multipurpose information appliances. Another paper presented a positive relationship between usefulness and perceived value of M commerce adoption (Ko et al. 2009).

In addition, my review showed that many articles about various sub determinants might fit under this determinant (Kapoor et al. 2014, Nysveen et al. 2005, Pagani 2004, Slade et al. 2015). Among others, Venkatesh et al. (2003) noticed the similarity of perceived usefulness to performance expectancy (Venkatesh et al. 2012, 2003) and relative advantage (Moore and Benbasat 1991, Rogers 2003). As a result, my paper considers these determinants as components of the expected benefit. The impact of performance expectancy on mobile channel use was the focus of several articles about MC use (Luo et al. 2010, Nysveen and Pedersen 2014. Slade et al. 2015, Venkatesh et al. 2012). Slade et al. (2015) confirmed a positive influence of performance expectancy on behavioral intention to use remote mobile payment systems. Another article found a positive relationship between performance expectancy and the adoption intention of mobile banking (Luo et al. 2010).

Several articles investigated the relationship between relative advantage and MC usage (Kapoor et al. 2014, Kim and Ammeter 2014, Kleijnen et al. 2007, Mallat 2007). Support for the positive influence of this determinant was reported in an article about intention to adoption of mobile payment services in India (Kapoor et al. 2014). Another study discovered that if mobile personal information systems are perceived to be better than their precursor, the probability is higher that consumer will use them (Kim and Ammeter 2014). Most of the proposed literature discussed a positive impact of expected benefit on MC use. Therefore, I assume that higher levels of expected benefit may increase the probability to use a MC and present the following hypothesis:

H_1: Expected benefit has a positive impact on mobile channel use.

Sacrifice

This paper describes expected sacrifice as the consumer's total estimation of what is given up in order to use the MC. The value definition of Zeithaml (1988, p. 14) and the perceived value definition of Kim et al. (2007, p. 2) provided the basis for this specification. As stated for benefit, I use expected and perceived constructs to study the impact of sacrifice on MC use. Apart from that, my review showed several constructs that might represent a sacrifice, but were interpreted as a benefit (e.g. perceived ease of use, time convenience, effort expectancy, price value). I found two papers that study the impact of sacrifice on MC use (Kim et al. 2007, Kleijnen et al. 2007).

Kim et al. (2007)divided sacrifices into non-monetary and monetary components. They proposed technicality as the key determinant of non-monetary sacrifices. This factor included several other non-monetary sacrifices such as ease of use, effort expectancy, convenience cost (e.g. time, location), system reliability, and psychological factors (e.g. anxiety, frustration). On the other hand, Kim et al. (2007) stated perceived fee as the financial cost consumers have to pay to use the mobile internet. They pointed out the pricing strategies (e.g. subscriptions) that influence the internal reference price of each consumer about a channel. Their study found prove for the negative impact of both determinants on adoption of the mobile internet such as M commerce (Kim et al. 2007).

Kleijnen et al. (2007) subdivided costs into risk and cognitive effort. Risk is associated with consumers' fear of possible negative outcomes (e.g. money or information loss) when using a mobile service such as M commerce. Furthermore, they discussed cognitive effort in relation to the complexity construct (Moore and Benbasat 1991, Rogers 2003). Complexity is pointed out as an inherent aspect of the mobile service, wherefore it is more concerned with the company (Kleijnen et al. 2007). In contrast, they discussed that the actual barrier of use derives from the cognitive effort needed to understand a complex mobile service. They found out that risk and cognitive effort have a negative influence on perceived value (Kleijnen et al. 2007).

Consistently with Kim et al. (2007) I included ease of use, technological anxiety (e.g. behavioral control, self-efficacy), effort expectancy, and price value in the determinant benefit. I note that all of ease of use, effort expectancy, and price value are positively

correlated with usage. However, the central idea of effort expectancy and ease of use is that consumers need to make a certain amount of effort in order to use a MC. Therefore, I inversely integrate these factors in the determinant sacrifice.

Price value, behavioral control and facilitating conditions were also operationalized with a positive influence on usage of a MC. In accordance to the perceived fee determinant (Kim et al. 2007), price value had also a reverse impact on the determinant sacrifice. The same is applied to behavioral control and facilitating conditions, because they are both concerned with barriers (e.g. urgency, weather) or assistance (e.g. tutorials, customer service) that may influence the use of a MC.

Various papers reported the association of ease of use with MC use (Gao et al. 2013, Guo et al. 2012, López-Nicolás et al. 2008, Nysveen et al. 2005, Pagani 2004). Nysveen et al. (2005) figured out the positive impact of ease of use on mobile services. One study stated that consumers believe using a MC is free of effort, the higher the likelihood is that they will use the MC (Pagani 2004). Furthermore, Nysveen and Pedersen (2014) reported a positive effect of effort expectancy on adoption of RFID-enabled mobile services.

Other articles investigated technology anxiety (Guo et al. 2012, Nysveen and Pedersen 2014) and similar constructs such as behavioral control (Dickinger and Kleijnen 2008, Karjaluoto et al. 2008, Nysveen et al. 2005), or facilitating conditions (Nysveen and Pedersen 2014). Behavioral control and facilitating conditions are inversely related to sacrifice. One article that extended UTAUT with technology anxiety found that this variable has a negative influence on consumers' adoption of RFID-enabled mobile services (Nysveen and Pedersen 2014).

Dickinger and Kleijnen (2008) reported that higher perceived control over the MC will lead to a greater intention to redeem a M coupon. Further, the intention to use mobile services is significantly influenced by perceived control (Nysveen et al. 2005). A positive effect of facilitating conditions on adoption of RFID-enabled M services was acknowledged by Nysyeen and Pedersen (2014).

I integrate constructs that are associated with risk based on the article by Nysveen and Pedersen (2014).These variables were part of frameworks that extended the various theories stated before (e.g. UTAUT, TAM) (Kapoor et al. 2014, Luo et al. 2010, Nysveen and Pedersen 2014, Slade et al. 2015). A positive association between perceived risk and actual use of M commerce found by Wu and Wang (2005). They stated that most of their study's respondents already had experience with M commerce and therefore knew from the risk before adopting the M commerce channel. Kapoor et al. (2014) figured out, that riskiness has a negative influence on the behavioral intentions to use a mobile payment service. This influence was reported for the behavioral intention regarding remote M payments (Slade et al. 2015). The presented literature revealed that there is a general negative impact of expected sacrifice on the likelihood to use an MC. Consistently, my hypothesis is stated as follows:

H_2: Expected sacrifice has a negative impact on mobile channel use.

Brand Preference

This article introduces a new determinant named brand preference based several relationship-related (Chaudhuri and Holbrook 2001, Oliver 1999) and brand-related variables (Keller 1993, Neslin et al. 2014). I describe brand preference as consumer's favorable image (e.g. trust) and awareness (e.g. credibility) towards the brand. In particular, the MC is based on various brand associations (e.g. names, channels, offerings, communication, and reputation). Most importantly this definition draws from the description of brand knowledge by Keller (Keller 1993, p. 3). Further, Chaudhuri and Holbrook (Chaudhuri and Holbrook 2001, p. 2) defined trust toward a "brand as the willingness of the average consumer to rely on the ability of the brand to perform its stated function".

In a MC context, trust can be referred to as consumers' willingness to have faith that the MC performs the promised functions. However, I note that trust cannot be directly created through MC. The reason for this is that consumers need to repeatedly use the MC in order to become loyal or gain trust. However, if they use the MC again, they performed the initial use already. The reason for this is, the willingness to rely on a brand apparently does not disappear across channels. Therefore, all the different

experiences that a consumer has with the brand (e.g. promotions, products) influence the probability to use the MC.

Two articles extended the TAM with trust in order to study its impact on MC (Chong et al. 2012, Zhang and Mao 2008). Chong et al. (2012) found out that higher levels of trust lead to a greater M commerce adoption of Malaysian consumers. Another article reported a positive association between trust and the intention to read a M advertising message (Zhang and Mao 2008).

Furthermore, trust was also used as an extension of UTAUT to study MC use (Luo et al. 2010). One study rejected the hypothesis about the positive relationship between trust and behavioral intention to adopt remote mobile payments, but confirmed a strong negative impact on perceived risk (Slade et al. 2015). Also, Luo et al. (2010, p. 2) discovered no significant influence of “trust belief” on behavioral intention to adopt M banking. In contrast, the article by Slade et al. (Slade et al. 2015) found no support for the negative impact of trust on perceived risk.

In addition, I assume that brand preferences might be influenced by the brand’s credibility (Liu et al. 2012, Tsang et al. 2004). A positive impact of credibility on attitude toward permission-based and unauthorized M advertising was reported by Tsang et al. (2004). Liu et al. presented significant support that higher levels of perceived credibility of M advertising lead to a greater perceived advertising value (2012). They found support that this M advertising had a positive influence on the attitude toward M advertising (Liu et al. 2012).

Furthermore, I believe that consumers are often overloaded by the amount of possible MC. They may consider only brands they are familiar with. For example, consumers with a positive memory of purchasing habitual products from a certain company are more likely to buy the same products while shopping with their mobile devices (Wang et al. 2015). They found proof that consumers are more likely to use M commerce for shopping if they purchased similar habitual products of the brand before or from manufactures they are already familiar with (Wang et al. 2015).

The presented articles revealed mixed findings. Some articles did not support the relation of trust and MC use (Luo et al. 2010, Slade et al. 2015). However, the majority of papers reported a positive impact for trust (Chong et al. 2012, Zhang and Mao 2008), credibility (Liu et al. 2012, Tsang et al. 2004), and familiarity (Wang et al. 2015). Therefore, I assume that a higher brand preference might be related to a higher probability for MC use and state the following hypothesis:

H_3: Brand relationship has a positive impact on mobile channel use.

Social Influence

Venkatesh et al. (2012, p. 3) defined social influence as "the extent to which consumers perceive that important others (e.g. family and friends) believe they should use a particular technology". Concerning my topic, I state the MC as the particular technology. They derived this description from the UTAUT (Venkatesh et al. 2003) and adjusted it to the usage of technology in consumer context. For example, a consumer that receives a friend's recommendation about the Pinterest application is more likely to use this app in the future. Venkatesh et al. (2003) stated that social influence is based on image from IDT and on subjective norm from TRA, TPB, and extended TAM (Venkatesh and Davis 2000). In accordance, I integrate these constructs into social influence.

As mentioned in the review, a large amount of research is concerned with studying the impact of social influence on MC use (Nysveen and Pedersen, 2014, Slade et al. 2015, Venkatesh et al. 2012). The UTAUT2 was developed by Venkatesh et al. (2012) based on a study of the usage of mobile internet. Their article found proof for the impact of social influence on behavioral intention to use the mobile internet. Slade et al. (Slade et al. 2015) reported a positive relation between social influence and the behavioral intention to adopt remote M payments in the United Kingdom. In contrast, no significant association between social influence and RFID-enabled M services was reported (Nysveen and Pedersen 2014).

Also, two articles extended the TAM with the determinant social influence (Chong et al. 2012, Lu et al. 2005). One article found support for the positive impact of social influence on perceived usefulness and ease of use of wireless internet services (Lu et

al. 2005). However, a higher pressure from social networks on consumers to adopt wireless internet services was not confirmed. Furthermore, Chong et al. (2012) discovered a significant negative impact of social influence on M commerce adoption of Malaysian and Chinese consumers.

Other researchers also discussed several modifications of subjective norm to study MC use (Dickinger and Kleijnen 2008, Nysveen et al. 2005, Zhang and Mao 2008). One article found the greater the pressure of important others to use the M service the higher the intention to use it (Nysveen et al. 2005). Furthermore, a positive relationship between subjective norms and behavioral intention to accept M SMS advertising was discovered (Zhang and Mao 2008). In contrast, Dickinger and Kleijnen (2008) reported no proof for the positive association between social norms and the intention to redeem M coupons. They noted that coupons are most often redeemed in private and therefore only little peer pressure exists to redeem them.

The research about social influence as a determinant of MC use leads to different opinions. Many papers confirmed an association between this construct and MC use (Lu et al. 2005, Nysveen et al. 2005, Slade et al. 2015, Zhang and Mao 2008). However, some scientists reported a negative or no relationship (Chong et al. 2012, Kleijnen et al. 2007). I propose the following hypothesis, because slightly more articles reported a positive effect of social influence on MC use:

H_4: Social influence has a positive impact on mobile channel use.

3.3 Company Determinants

Attributes' Optimization

I define improvement of MC attributes as all the favorable characteristics (e.g. design, structure, functions) that companies can optimize in order to influence consumers' usage of a MC. This definition was obtained from the prior stated definition of system characteristics (Venkatesh and Bala 2008, p. 4) and adjusted to the context of MC use. Examples are the adaptation of app interface graphics to the brand's colors (e.g. blue and white for BMW) (Hoehle and Venkatesh 2015) or the adjustment of the language to consumer segments (e.g. early adopters, innovators) (Pagani 2004).

My literature review showed that limited research deals with the optimization of MC attributes as a determinant of use (Hoehle et al. 2015, Hoehle and Venkatesh, 2015; Kim and Hwang 2012, Venkatesh and Ramesh 2006). I further justify the inclusion of this determinant with the vast amount of IS research (Davis 1993, Delone and McLean 2003, Lucas and Nielsen 1980).

Davis studied the impact of system characteristics on perceived ease of use and usefulness in a job context. He mentioned functional and interface attributes which are mainly under the control of IS developers, managers, and designers. Their study reported that appropriate IS characteristics have a significant positive association with perceived ease of use. In addition, a positive effect on attitude towards using an IS was discovered. However, they found no support for the positive direct impact of system attributes on actual usage (Davis 1993).

I note several discrepancies regarding the existing articles about MC attributes (Hoehle et al. 2015, Hoehle and Venkatesh 2015, Kim and Hwang 2012, Venkatesh and Ramesh 2006). The inclusion of these papers I justify as follows. First, I believe that the term MC attributes is more suitable than usability as a determinant in my context. However, several articles included usability as a predictor of use (Hoehle et al. 2015 Hoehle and Venkatesh 2015, Kim and Hwang 2012 Venkatesh and Ramesh 2006). The discussed sub determinants for usability in these papers are mainly in control of the company (e.g. design, structure, content) (Hoehle et al. 2015, Hoehle and Venkatesh 2015, Venkatesh and Ramesh 2006).

Second, I incorporate these articles although they are concerned with continued intention of usage or frequent use (Hoehle et al. 2015, Hoehle and Venkatesh 2015, Kim and Hwang 2012). The reason for this is apparently that consumers only use a channel that provides adequate characteristics such as an effective design or relevant functions (Hoehle and Venkatesh 2015). For example, consumers may decide against using a MC, because of preview pictures which show a poorly designed application or bad meta descriptions about the content of a website in the Google search results (Hoehle and Venkatesh 2015, Venkatesh and Ramesh 2006).

Table 8: Mobile Application Usability Definitions	
Determinant	*Definition*
Application design	"The degree to which a user perceives that a mobile application is generally designed well" (Hoehle and Venkatesh 2015, p. 13).
Application utility	"The degree to which a user perceives a mobile application generally serves its purpose well" (Hoehle and Venkatesh 2015, p. 13).
User interface graphics	"The degree to which a user perceives a mobile application's user interface graphics to be effectively designed" (Hoehle and Venkatesh 2015, p. 15).
User interface input	"The degree to which a user perceives that a mobile application allows easy input of data" (Hoehle and Venkatesh 2015, p. 15).
User interface output	"The degree to which a user perceives that a mobile application presents content effectively" (Hoehle and Venkatesh 2015, p. 16).
User interface structure	"The degree to which a user perceives that a mobile application is structured effectively" (Hoehle and Venkatesh 2015 p. 16).

Source: (Hoehle and Venkatesh 2015)

Hoehle and Venkatesh (2015) proposed application design, application utility, user interface graphics, user interface input, user interface output, and user interface structure as constructs based on the user experience guidelines by Apple for M apps. Table 8 shows the description of these factors. The study about 1,200 U.S. consumers of social media applications concluded that all these determinants have a significant positive impact on continued intention to use. Moreover, they noticed app design, app utility, and user interface graphics to have the strongest effect (Hoehle and Venkatesh 2015).

Another paper examined the factors that affect consumers' usage of wireless sites based on the "Microsoft Usability Guidelines" (Venkatesh and Ramesh 2006, p. 1). Venkatesh and Ramesh (2006, p. 1) suggested content (e.g. relevance, timely information), ease of use, promotions, emotions, and "made-for-the-medium" (e.g. personalization) as determinants. The last determinant is described as the degree to which a website is adapted to the needs of a certain consumer. Their study revealed that relevant content led to a significant higher probability to use wireless websites.

Further, Venkatesh and Ramesh (2006) reported a higher positive impact of effective structure on wireless sites than online websites. A positive association between personalization of the medium and wireless site use was discovered. They found that

out for shopping in the tourism industry, where higher levels of emotions led to a greater use.

The article of Kim and Hwang (2012) proposed information quality, perceived design quality, and perceived connection quality from a consumer perspective. Consistently, I note that all these factors are determined by the company, because these constructs obviously draw from channel attributes. Therefore, an optimization of these determinants enable companies to influence consumers' usage of mobile internet services. Their article came to the negative association between utilitarian tendency and connection quality, design quality, and information quality. They stated this as a possible reason that current mobile services do not provide sufficient functions to busy consumers (e.g. demand more speed). In contrast, they reported that higher hedonic tendencies led to a greater perceptions of information quality, design quality, and connection quality.

My research indicates that an improvement of the MC attributes may lead to a higher likelihood that consumers use a MC (Hoehle and Venkatesh 2015, Shen 2015, Venkatesh and Ramesh 2006). Therefore, I suggest the following hypothesis:

H_5: Attributes optimization' has a positive impact of MC use.

Forced Migration

This article defines forced migration strategies as moving consumers from one channel to the mobile channel through coercive actions, unless the consumers decides to use the channel of another company (Trampe et al. 2014). I found several multichannel papers (Konuş et al. 2014, Neslin and Shankar 2009, Reinders et al. 2008) and a few MC articles (Dickinger and Kleijnen 2008, Reichhart et al. 2013) that deal with forceful strategies.

Trampe et al. (2014) stated that mostly forced strategies deal with the elimination of existing channels, which aims at convincing consumers to switch channels. The main trigger for eliminating a channel is that some channels become increasingly expensive in comparison to others (Konuş et al. 2014). This article stated that the reasons are higher costs of labor or development of new technologies. Therefore, companies

needed to optimize their operations by convincing consumers to switch to a less costly channels (Neslin and Shankar 2009, Reinders et al. 2008, Trampe et al. 2014).

I suggest the MC to be such an effective channel. The first reason is that today M phones and older versions of smartphones are already available at a low price (Sultan et al., 2009). The second reason is that a MC provides firms with various functions (e.g., distribution, communication) that enable a personal interaction with consumers at anytime and anywhere (Shankar and Balasubramanian, 2009). Therefore, I logically conclude that the best way to improve the operative performance is to move consumers from ineffective channels (e.g., mostly store) to the MC in order to reduce costs for employees, and stores among others. This assumption is partly supported by a study (Konuş et al., 2014). They found that channel choice is shifted from telephone to the internet channel to which the MC belongs.

Table 9: Reinforced Strategies

Determinant	*Definition*
Reward-based migration	"Firms may offer rewards (e.g. customers receive a financial benefit when they migrate to the channel preferred by the firm)" (Trampe et al. 2014, p. 2).
Punishment-based migration	Firms may offer "punishments (e.g., customers have to pay a high(er) fee when they continue the use of the incumbent channel) that steer customers to alternative channels in a backhanded but still forceful manner" (Trampe et al. 2014, p. 2).

However, several researchers stated that right-channeling may dissatisfy consumers (e.g. emotional discomfort, frustration) and keep new consumers from getting in contact with the firm (Neslin and Shankar 2009, Trampe et al. 2014).

Trampe et al. (2014) presented reinforced strategies as opportunities to negate these adverse effects, which are named customer reactance. They differentiated reinforced strategies from voluntary strategies by noting that these counteracting strategies (e.g. discount for switching) are still based on force. Further, they presented reward-based (e.g., discounts, gifts, bonus points) migration strategies and punishment-based migration strategies (e.g., (higher) prices, reduced services, longer waits) as the two main types of reinforced strategies.

I demonstrate the definition of these strategies in Table 8. One example for reward-based strategies are M coupons that provided consumers with a discount for an offer that they can redeem in the MC (Dickinger and Kleijnen 2008). An instance for punishment-based migration strategies was charging consumers a higher fee for banking services in the bricks and mortar store in order to move them to M websites and apps for the same services (Ha et al. 2012).

The article of Trampe et al. (2014, p. 4) empirically tested the impact of forced on migration reactance and found significant support for this variable on consumers' reactance. I note that for my paper consumers' reactance is negatively related to channel usage. They reported that forced migration creates higher levels of reactance among consumers than voluntary migration strategies. Still, I suggest that these strategies are sufficiently positively related to the probability of consumers to switch to the MC.

Another multichannel article examined the influence of elimination of service delivery channels through "technology-based self-service" for ticketing and travel-information (Reinders et al. 2008, p. 1). Reinders et al. (2008) reported negative effect of forced use of self-service systems on attitudes toward the system. In contrast, the hypothesis that more service delivery opportunities may lead to a more favorable attitude toward the system was not confirmed. Furthermore, they discovered that consumers with a more positive attitude towards such a self-service system and the service provider may decrease the probability that they switch to another service mode.

My review indicated only a few papers dealing with the influence of punishment- and reward-based migration strategies and use (Dickinger and Kleijnen 2008, Reichhart et al. 2013, Trampe et al. 2014). Punishment-based strategies were discussed and empirically tested in an article by Trampe et al. (2014). They discovered that punishment-based strategies have similar high levels of consumers' reactance like forced migration strategies.In contrast, three papers deal with reward-based migration strategies. Trampe et al. (2014) reported that rewarded migration creates significantly less reactance than punishments or channel eliminations. However, they found that reward-based migration may be associated with higher levels of resistance to switch than voluntary strategies.

Two papers studied the impact of distributing M coupons (i.e. reward offerings) in order to convince consumers of using the MC to redeem them (Dickinger and Kleijnen 2008, Reichhart et al. 2013). Dickinger and Kleijnen (2008) investigated the association between the distribution of coupons and the intentions to redeem them in the MC. Their study implicated that consumers who receive more frequently M coupons, have higher levels of intention to redeem these coupons on M websites or M apps.

Reichhart et al. (2013) compared the impact of M text message coupons and e-mail coupons on purchase behavior and response rates. They found out that consumers that received M text message coupons were more likely to use the promoted websites for purchase. In contrast, less consumers responded to M message coupons than to e-mails.

In conclusion, I note that forced migration strategies may strongly dissatisfy consumers if they are not implemented carefully. Reward-based reinforcement strategies can provide an opportunity to reduce this negative effect. Still, forced migration obviously enables firms to move many consumers to the MC as suggested by my review (Reichhart et al. 2013, Reinders et al. 2008, Trampe et al. 2014). Therefore, I assume that the implementation of forced migration strategies has a positive influence on the likelihood that consumers switch to the MC and state the following hypothesis:

H_6: Forced migration has a positive impact on mobile channel use.

Voluntary Migration

I define voluntary migration strategies as leaving consumers the freedom to choose the MC "among multiple, fully available channels" (Trampe et al. 2014, p. 1). My review revealed several multichannel articles (Ansari et al. 2008, Herhausen et al. 2015, Trampe et al. 2014) and a few MC papers (Venkatesh and Ramesh 2006) that deal with the influence of voluntary migration on MC use.

Trampe et al. (2014) found that voluntary migration strategies create less consumers' reactance than forced, punishment-based, or reward-based migration strategies. Although voluntary strategies dissatisfy consumers only little, I point out that these

strategies are often not able to directly affect consumers' channel choice in comparison to channel eliminations.

However, companies are able to indirectly influence consumers' voluntary choice to use a channel (e.g., channel integration, non-coercive advertising) (Herhausen et al. 2015). Based on the description by Bendoly et al. (2005) channel integration is defined as "the degree to which different channels interact with each other" (Herhausen et al. 2015, p. 2).

I introduce MC promotion and MC integration as strategies to influence the voluntary choice of consumers to use a channel (Ansari et al. 2008, Bart et al. 2014, Gupta et al. 2004). Frist, MC promotions are described as communication that is aimed at convincing consumers of using the MC by advertising its benefits (Ansari et al. 2008, Gao et al. 2013, Trampe et al. 2014, Venkatesh and Ramesh 2006). The most prominent form of promotion in MC literature is M advertising (Bart et al. 2014, Grewal et al. 2016). One multichannel article by Ansari et al. (Ansari et al. 2008) proposed that channel choice might be affected by migration strategies (e.g. communication) to inform consumers about positive aspects of a specific channel.

The article revealed that generally catalogs have a greater potential to move consumers to the e-mail channel in comparison to the other way around. Moreover, they reported that for heavy internet users, e-mails lead to more consumers switching Ansari et al. 2008). The research further stated that excessive use of such communication activities may lead customers to switch to other providers.

I point out that such communication invitations are voluntary, because they are suggestions rather than coercive actions (Trampe et al. 2014). Therefore, this paper assumes that catalog and e-mail communication may have a positive impact on the voluntary decision of consumers to use a MC.

One MC article studied the impact of M advertising (e.g. display advertising) on consumer attitudes and purchase intentions to (Bart et al. 2014). I assume that these purchase intentions mostly lead to the use of M commerce website or app, because display ads often include an interactive link to the MC.

Furthermore, their study found a significant positive impact of M advertising on attitudes and purchase intentions for high involvement and utilitarian products (Bart et al. 2014). They stated that M display ads function as memory cues instead of information, because these ads can only contain little information.

Second, MC integration deals with improving the interaction between channels in order to make it more convenient for consumers to switch to the MC (Gupta et al. 2004, Herhausen et al. 2015). Herhausen et al. (2015) investigated the integration of online and offline in a multichannel context. The main approach they considered in this article was making knowledge about the internet store available to consumers in the physical store and providing access to knowledge about the physical store in the internet store.

Their study reported a positive impact of “online-offline channel integration” on perceived service quality and perceived risk of the internet store (Herhausen et al., 2015, p. 1). I assume that such integration efforts have a similar impact on the M store, because of the increasingly similar functions provided by the M and internet store. Furthermore, increasing the perceived service quality in the internet store led to a more positive effect on search intentions, purchase intentions, and the overall willingness to pay. In contrast, the article found no support that decreasing perceived risk might positively influence these outcomes (Herhausen et al., 2015).

Another article examined consumers’ switching intention from offline to online store based on the influence of price-search intentions, evaluation effort, channel risk perceptions, delivery time, and search effort (Gupta et al. 2004). They found support for the positive impact of these factors on channel switching. Consistently, I include them into this paper due to similarity between internet and M stores.

Gupa et al. (2004) reported little support that consumers perceiving lower risk regarding channel switching may lead to switch to online channels. Further, a significant positive impact of price-search intentions and evaluation effort on the intention to switch channels was found. Except for airline tickets, a positive association between delivery time and moving to online channels was reported. In contrast, Gupta et al. (2004) discovered no support for the negative relationship between search effort and switching to online channels.

In summary, voluntary migration might have a positive impact on the probability of consumers to switch to the MC (Ansari et al. 2008, Bart et al. 2014, Gupta et al. 2004, Herhausen et al. 2015). I point out that this likelihood can be increased by increasing MC promotion and channel integration MC efforts.

H_7: Voluntary migration has a positive impact on mobile channel use.

4 Implications for Theory and Practice

My paper revealed several implications for researchers and practitioners. The scientific implications include the lamination of my article as well as future ideas for research. The managerial implications give insight on how the findings of this paper can be put into practice.

4.1 Implications for Theory

This paper should be viewed as a first step toward understanding the reasons why consumers use a MC. The term MC is fairly new, therefore this paper provides various definitions as a solid theoretical foundation and outlines several company- and consumer-related determinants that affect MC use. However, my paper contains some restrictions as well.

I point out to the vast amount of moderators that could potentially affect the relationship between the presented determinants and my dependent variable. For instance, several articles incorporate age (Venkatesh et al. 2012), gender (Venkatesh et al. 2012), and personal innovativeness (Agarwal and Prasad 1998). In my view this should not be considered for studying the first use of a MC.

In addition, I propose M sub channel types (e.g., websites, messages, apps) and MC function types (e.g., promotion, distribution) as possible moderators. The first moderating variable may impact the relationship between expected benefit and MC use. The reason for this is, that users may have different expectations how useful a M application will be in comparison to M applications. Further, M functions might affect

the association between MC attributes' optimization and MC use, because every channel needs to provide other functions.

The validity of the relationships of the presented determinants and MC use is limited. The reason for this is that this paper does not empirically investigate their associations. Further, the existing articles do not statistically evaluate the MC in general, but its various sub channels. Therefore, I suggest further research to test the presented hypothesis.

4.2 Implications for Practice

My paper provides companies with a first overview of the topic MC use and gives insights into the various factors that might influence consumers channel choice. Today's consumers are increasingly demanding. Therefore, I point out that firms need to pay high attention to consumer as well as company determinants that are presented.

First, companies need to understand which benefits and sacrifices consumers expect. Therefore, they need to constantly monitor recent trends that have an impact on these factors. The functions consumers expect of a website need to be constantly examined, because needs and wants change quickly. For example, if competitors reduce the price for their gaming apps, the firm needs to be aware of this change and accordingly adapt their pricing strategy.

The opinion of others has obviously a large effect on the M and internet channel use. Firms need to be present on social media in order to intervene in the case consumers are angered about their offers or promotions. Moreover, they need to supervise if consumers still perceive that they are trustworthy and credible. Altogether, I recommend to integrate M metrics to monitor consumer behavior in the MC in order to react as fast as possible.

Second, the attributes of MC need to be constantly adapted based on recent consumer data. For example, firms need to adapt the design of their websites to the brand or include new functions into their apps. Furthermore, forced strategies need to be carefully implemented in order to minimize the dissatisfaction of consumers. Especially, reward-based reinforcement strategies, because they create less

reactance among consumers and may still provide an efficient way to move them to the MC. Voluntary strategies can be helpful to firms if the company is not under time pressure. I note that promotion and integration strategies of the MC might present opportunities for firms to accelerate the process of consumers' to voluntarily switching to the MC.

5 Conclusion

The goal of this paper is, to get a deeper understanding which determinants influence the probability of consumers to use the MC. Therefore, I combine the several sub channels into one MC and integrate existing as well as new determinants to provide a more holistic conceptual framework. The different sections of my article provide the following findings:

The first section builds the basis for the motivation for my topic in three ways. I state how the MC impacts the individuals and firms. The figures show that companies frequently take advantage of the MC to connect with consumers. I point out the vast amount of MC literature that is devoted to explaining MC use. Furthermore, the goal of this paper is to provide a more holistic conceptual framework by integrating consumer- as well as company-related determinants and various M sub channels (e.g. apps).

The second section covers the theoretical background for my conceptual framework. One subsection provides necessary definitions about MC use. The MC is based on M devices, wherefore I explain the unique characteristics (e.g. portable, personal). Moreover, I state the definition of MC and explain the dependent variable MC use. The MC consists of many different sub channels (e.g. websites, messages) and provides various functions (e.g. promotion, distribution), which is why I describe each of these aspects.

The other subsection is about review of the current research streams that deal with company- and consumer-related determinants of MC use. The review revealed, a large amount of literature which is concerned with consumer variables (e.g. perceived usefulness, perceived enjoyment). However, I notice a lack of research about factors

that enable companies to influence consumers' MC use. Few studies deal with the improvements of MC (e.g. design, structure) or strategies that firms can implement (e.g. forced migration, voluntary migration).

The development of the framework based on determinants of MC use is the focus of this section. I provide an overview of consumer- and company-related categories and examine each of the determinants. Concerning the consumer-related determinants, the article discovered the following effect for each determinant. Benefit is expected to have a significant positive effect on MC use (Kapoor et al. 2014, Luo et al. 2010, Nysveen and Pedersen 2014, Slade et al. 2015). In contrast, a significant negative impact might be the result of expected sacrifice (Gao et al. 2013, Kapoor et al. 2014, Nysveen and Pedersen 2014). The found documents indicated that brand preference (Chong et al. 2012, Tsang et al. 2004, Zhang and Mao 2008) and social influence (Kleijnen et al. 2007, Nysveen et al. 2005, Slade et al. 2015) have a slightly positive affect.

On the other hand, company-related findings are more scattered and revealed only a small influence on MC use. However, the articles indicated that companies might have several opportunities to alter the channel choice of consumers. Optimization of MC attributes may be positively related to usage (Hoehle and Venkatesh 2015, Shen 2015, Venkatesh and Ramesh 2006). Findings on forced migration (Reichhart et al. 2013, Reinders et al. 2008, Trampe et al. 2014) and voluntary migration (Ansari et al. 2008, Bart et al. 2014, Gupta et al. 2004, Herhausen et al. 2015) suggested a positive impact but this is only supported by little research about MC.

The fourth section deals with the implications for managers. I present several suggestions such as improving the channel structure or forcing consumers to use the MC by distributing M coupons (e.g. discounts). Future research are pointed out to focus on studying the company-related determinants in more detail and the various moderators such as personal innovativeness, MC sub channel, or MC functions.

In summary, I point out that various opportunities exist for companies to intervene in the channel choice of consumers. Furthermore, they need to constantly optimize their MC, adapt their multichannel strategy, and efficiently communicate the benefits of the

MC. On the other hand, firms have to constantly improve their understanding of their target group by measuring changes in their behavior. Based on my findings, it is safe to assume that the presented company- and consumer-related determinants might influence the likelihood that consumers use the MC.

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