The value of mobile marketing for consumers and retailers: a literature review

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ABSTRACT

Purpose: In this review mobile device shopping, consumers' use of mobile devices while shopping, is assumed to be an extension of consumers' shopping behaviors developed on internet connected desktop and laptop computers (PC). The purpose is to describe existing knowledge on how mobile marketing can increase value for consumers and retailers, enabling more precise research and development of managerial concepts and tools, providing both managers and academics with increased understanding of mobile marketing and it's outcome value for retailers.

Methodology/Approach: The review is based on a qualitative content analysis of 64 selected peer-reviewed articles presenting empirical results. The results are categorized based on research themes, and then discussed within and between categories.

Findings: Mobile marketing increases perceived value for consumers and outcome value for retailers. But only limited support is found supporting mobile marketing as more effective than retailers' alternative marketing investments. Indications of increased outcome value of retailers' existing marketing investments are found by the effects of mobile channel addition and integration. The path between consumer perceived value and retailers' outcome value is indicated, but not verified. The existing knowledge regarding mobile device shoppers, consumers using mobile devices for shopping and potentially being valuable segments for retailers, is limited to their interactions with mobile advertising and use of mobile retail services. Mobile marketing delivers multiple perceived values to consumers (utilitarian, emotional/ entertainment/ hedonic and social values), and relative benefits and values of mobile devices (enjoyable, timely and offered companionship) and marketing (efficiency, time and location convenience) compared to PC internet. These values may be perceived differently depending on shopping context. For consumers and retailers to leverage the full potentials of mobile marketing, integrations with entire consumer interfaces may be needed, implying development of partner network and structural bonds within partner networks, structural changes of IT-structure and organizations, potentially resulting in foundations for sustainable competitive advantages.

Research Implications/Limitations: Abilities to generalize results from this review are affected by the limited numbers of selected studies. Results from other industries are generalized as valid for retailing, while results of mobile advertising applications in some cases are generalized as valid for other mobile marketing application areas.

Originality/Value/Contribution: The review describes the value of mobile marketing in a consumer retail context, discussing less studied mobile marketing application areas, support for physical service interactions in-store and post-purchase interactions, highlighting potentials of mobile marketing integration with entire consumer interfaces, and suggesting a holistic approach studying users of mobile devices, services and marketing. Managerial implications and implications for further research are presented.

Keywords: Mobile marketing, mobile device shoppers, mobile advertising, m-advertising, in-store mobile marketing, internal mobile marketing, mobile customer relationship management, m-CRM, mobile marketing integration, mobile marketing implementation, mobile marketing metrics, retailing.

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INTRODUCTION

In retailing internet created consumer surplus decreasing consumer search costs, making it easier and less costly for consumers finding products or services, making prices more transparent, (Bakos, 1997, Lynch & Ariely, 2000), increased the variety of products offered (Brynjolfsson, Hu & Smith, 2003) and lowered prices (Brynjolfsson & Smith, 2000). Consumers were empowered by internet increasing the relationship with the purchased brand after purchase, 60% of consumers of facial skin care products conducted online research after purchase (Court, Elzinga, Mulder et al, 2009, Edelman, 2010). But internet fell short of expectations when consumers wanted experiences, a product trial,

in-store atmosphere, or interacting with a salesperson (Daugherty, Li & Biocca, 2008). Recently, mobile devices offer opportunities combining information search, use and exchange while shopping in-store or experiencing a product. A mobile device is a constant companion to the consumer, a gateway to a relationship between the consumer and the retailer, making it an ideal supplementary channel for distance selling and physical retailing (Shankar, Venkatesh, Hofacker et al, 2010). An industry study showed half of US mobile consumers being mobile device shoppers, 10 percent heavy and 40 percent light users (Leo Burnett & Arc Worldwide, 2011). But mobile devices were different from desktop and laptop computers (PC) due to limited key board and screen size (Mahmoud & Yu, 2006), while offering functions as camera, scanners and Global Positioning System (GPS). This makes mobile marketing potentially different from PC internet and traditional marketing. The Mobile Marketing Association definition of mobile marketing is "a set of practices that enables organizations to communicate and engage with their audience in an interactive and relevant manner through any mobile device or network" [1].

In conceptual studies the additional value created by mobile services for consumers derived from being accessible independent of time and place (Balasubramanian, Peterson & Jarvenpaa, 2002, Chen & Nath, 2004), and customized based on time, location and personal profile (Figge, 2004), self ascribed roll and the stance (Dholakia & Dholakia, 2004). According to Kumar and Zahn (2003) the real business drivers for mobile technology were customer interaction and operational efficiency, potentially increasing retailer effectiveness and efficiency. Conceptual studies presented suggestions on mobile marketing value chains consisting of several activities performed by multiple actors (Barnes, 2002, Buellingen & Woerter, 2004), improving communication and sales (Mamaar, 2003, Shankar & Balasubramanian, 2009).

Based on the above there are some concerns that need to be discussed. Unexplored questions are; who are the mobile device shoppers, what is the value of mobile marketing for retail consumers, what is the value of mobile marketing for retailers, and how can potentials in mobile marketing be realized by retailers? To gain knowledge about these issues, the purpose of this study is to describe existing knowledge on how mobile marketing can increase value for consumers and retailers. Value for consumers is assumed to drive adoption, use and loyalty to retailers mobile marketing applications and recruitment and loyalty to retailers. These factors are creating the foundation of competitiveness of retailers (Porter, 1985). This paper will proceed as follows: the methodology is presented followed by the literature review. Next, the findings are discussed. Finally, conclusions, managerial implications and implications for further research are presented.

METHODOLOGY

A preliminary literature search was conducted during April 2010 using the ISI Web of Knowledge database. The literature search was limited to peer-reviewed journals and was based on keywords as: "mobile marketing", "m-marketing", "mobile commerce", "m-commerce", "mobile advertising", "m-advertising", "mobile loyalty" and "m-loyalty". The 50 most cited articles were selected (cited five times or more). Several conceptual studies and some best demonstrated practice/output value covered topics as mobile value creation and mobile value chains, while a limited number of studies were related to consumer perceived value in mobile contexts.

A complementary literature search was conducted during September and October 2011, using the ISI Web of Knowledge database with the above search words in combination with "value", "value chain", "strategy" and "perceived value". A search was also conducted in International Journal of Mobile Marketing and International Journal of Mobile Communications, as the majority of articles covering mobile marketing were published in these journals (Varnali & Toker, 2010). Assuming differences in consumer behavior on a more general technology level (devices and services) compared to the specific mobile marketing level, the search was expanded due to the low number of studies. Search words of closely related constructs to perceived value as "attitude", "perceptions", "satisfaction" and "trust" were used in combination with the search words from the 2010 search. In total 16 studies of consumer perceived value in the mobile contexts were identified, 7 about mobile marketing and 9 about mobile services or devices, while 32 other studies of consumer adoption, use or loyalty of mobile marketing were identified. The search also identified 16 empirical studies related to mobile marketing value creation in firms. A total of 64 empirical studies were selected for a qualitative content analysis, categorized based on research themes, and then discussed within and between categories. For an overview of the reviewed studies see Table 1-4 in Appendix 1.

LITERATURE REVIEW

In this review value creation in mobile contexts are described from both a consumers' and retailers' perspective in chapters as, the value of mobile marketing for consumers, and the value of mobile marketing for retailers. The value of mobile marketing for consumers is further divided into mobile device shoppers and consumer perceived value benefits and sacrifices of mobile marketing. The value of mobile marketing for retailers is divided into the improved value of mobile marketing, and realizing potential value in mobile marketing.

The value of mobile marketing for consumers

Value is the benefits offered by the product or service compared to customer sacrifices for acquisition and use of the product and service relative competition (de Chernatony, Harris & Dall'Olmo Riley, 2000, Ulaga, 2003, Walter, Ritter & Gemünden, 2001, Zeithaml, 1988), and differed based on consumer product experiences (Parasuraman, 1997). Consumer perceived value effected acceptance and use of mobile technology, services and marketing (Constantinou, Papazafeiropoulou & Vendelø, 2009, Constantinou & Mahnke, 2010, Dai & Palvia, 2009, Kim, Chan & Gupta, 2007, Kim & Hwang, 2006, Kleinen, de Reuter & Wetzels, 2009, Laukkanen, 2007, Mahatanankoon, Wen, & Lim, 2005, Park & SuJin, 2006, Turel, Serenko & Bontis, 2007, Xu, Oh & Teo, 2009, Xu, Lou, Carroll et al, 2011, Yang and Jolly, 2006), and loyalty to mobile services and marketing (Deng, Lu, Wei et al, 2010, Lin & Wang, 2006, Pilström & Brusch, 2008). But the path between perceived value and retailers' outcome value was not verified.

In several studies related to mobile marketing value for consumers, perceived value was not explicitly measured. But the majority of the studies measured benefits and sacrifices components. Studies of consumer mobile marketing adoption used the Technology Acceptance Model (TAM) by Davis (1989, the Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975), the Theory of Planned Behavior (TBP) by Fishbein and Ajzen (1975), and Rogers (1995) innovation attributes. Studies of consumers' mobile advertising use were mainly based on Media Gratification Theory (Atkin, 1973), adopted to mobile media (Tsang et al, 2004) and affecting attitudes, mobile media behavioral intent and behavior. The TBP model included evaluations of benefits and perceived risk, media uses and gratifications theory (Okazaki, 2007:2) included media benefits and perceived irritation. In some perceived value studies a similar construct to ease of use in the TAM model was used as a sacrifice construct (Kleijnen et al, 2009).

The most influential studies of consumer adoption of mobile device and service were highlighting the importance of utilitarian benefits and hedonic constructs of fun (Bruner and Kumar, 2005, Nysveen et al, 2005) and expressiveness (Nysveen et al, 2005). Lately a limited number of studies of mobile marketing adoption were presented (Alda´s-Manzano, Ruiz-Mafe´ & Sanz-Blas, 2009, Amin, 2008, Kim, Ma & Park, 2009, Lu & Su, 2008, Muk, 2008, Roach, 2008, Zhang & Mao, 2008). Mobile push advertising use, as Short Media Service (SMS) and Multimedia Service (MMS), were studied by Barutcu (2007), Bauer, Reichardt, Barnes et al (2005), Carroll, Barnes, Scornavacca et al (2007), Cheng, Blankson, Wang et al (2009), Choi, Hwang & McMillan et al (2008), Chowdhury, Parvin, Weitenberner et al (2006), Gao, Rau & Salvendy (2009), Jayawardhena, Kuckertz and Karjaluoto et al, (2009), Moynihan, Kabadayi & Kaiser (2010), Peters, Amato & Hollenbeck (2007), Rau, Zhang, Shang et al (2011), Tsang, Ho and Liang (2004), Wais and Clemons (2008), Wang and Acar (2006), Xu (2006), and mobile coupons (Dickinger & Kleijnen, 2008). Mobile pull advertising as mobile internet advertising were studied by Gao, Rau and Salvendy (2009), Haghirian and Inoue (2007), Okazaki (2007:1), Okazaki (2007:2), Okazaki et al (2007), Okazaki and Hirose (2009). Benefit or quality dimensions affect on loyalty to mobile services and marketing were studied by Chae, Kim, Kim et al (2002), Choi, Seol, Lee et al (2008), Cyr, Head and Ivanov (2006). Utilitarian and hedonic value tendencies affect on perceptions of service quality were studied by Kim and Hwang (2006).

Mobile device shoppers

Two studies from the Japanese market revealed segments of mobile internet and mobile device shoppers (Okazaki, 2007:2, Okazaki & Romero, 2010). Okazaki (2007:2) suggested that Japanese mobile internet users can be classified into three segments in terms of their demographics and life-styles:

- Housewives' and female part-timers' (Cluster 1) primary motives to positively perceive wireless advertising were fun and relaxation. Mobile content was perceived neither as an alternative channel, nor as a credible source of advertising in the traditional sense.
- Middle-aged male managerial, administrative, freelance, and self-employed workers (Cluster 2) have low mobile internet service penetration, though expected to have of high levels of adoption .
- Students and young, unmarried office workers (Cluster 3) exhibited higher usage of mobile internet, using mobile pull advertising to a higher degree to search for new information. Growth of mobile internet owed much to unmarried women, living with their parents rent-free, using their entire salary as spending money.

Though the study identified different usage level segments of mobile pull advertising users, it revealed limited knowledge about mobile device shopping behaviors. Mahatanankoon et al (2005) identified valuable m-commerce operation modes and potential consumer-based applications. Applications of a certain interest for mobile device shoppers seemed to be content delivery (searching and receiving information about retailers, assortments, brands, prices etc), transaction based (order and payment services), location based (receiving personalized, location based and time sensitive offers, advertising, map and route to closest store, finding products in-store and usage instructions). Other mobile functions potentially valuable for mobile device shoppers may be memory support (shopping lists, pictures of products and brands and bookmarks on web browsers), administration of loyalty benefits, and sharing of

information and content.

Mobile device shoppers had higher knowledge and self-efficacy (Moynihan et al, 2010). As consumers they had an exploratory search behavior (Wang & Acar, 2006), and were more involved and/or more price-conscious, and had higher education and income (Barutcu, 2007). Their use of mobile services and marketing seemed to have high compatibility with previous behaviors (Alda's-Manzano et al, 2009, Roach, 2009), especially with PC internet or other mobile experiences (Alda's-Manzano et al, 2009, Deng et al, 2010, Kleinen et al, 2009, Lin & Wang, 2006, Lu & Su, 2008, Okazaki, 2007:1). Okazaki and Romero (2010) also identified segments of dual internet media user. Four different internet user segments on the Japanese market were identified:

- Segment 1 (29% of sample) included marginal fixed internet users with moderate mobile internet usage.
- Segment 2 (28% of sample) were heavy users of both fixed and mobile internet. They were likely to spend more time on their information searches in both media. They were also likely to seek information regarding specific content in both online venues.
- Segment 3 (23% of sample) consisted of heavy fixed internet users who seldom accessed the mobile internet.
- Segment 4 (20% of sample) consisted of heavy mobile internet users who used fixed internet only moderately.

The results also indicated that PC internet may be used for recruitment of mobile device shoppers on markets with high fixed internet penetration and high fractions of dual media users. A higher percentage of segment 2 (dual media users) and 4 (mobile internet users) consisted of females (63 and 66 percent, respectively). In contrast fixed internet users were predominantly men, but the primary adopters of the mobile internet were female office and administrative employees (Okazaki & Romero, 2010). The literature revealed that differences in perceptions, social influence and behavior intent towards mobile services and marketing were affected by gender (Constantinou & Mahnke, 2010, Deng et al, 2010, Okazaki, 2007:1), age (Barutcu, 2007, Deng et al, 2010), and cultural differences (Choi et al, 2008, Constantinou et al, 2009, Dai & Palvia, 2009, Muk, 2007).

Consumer perceived values, benefits and sacrifices of mobile marketing

Results from several studies verified mobile service values as functional or utilitarian (quality, performance, usefulness or convenience value), emotional, social (social approval, enhanced social self-concept by service use, or feelings of being connected to others by using a product or a service) and monetary value (Kim et al, 2007, Pilström & Brusch, 2008, Turel et al, 2007,

Yang & Jolly, 2006). Utilitarian (Alda´s-Manzano et al, 2009, Amin, 2008, Kim et al, 2009, Lu & Su, 2008, Zhang & Mao, 2008) and emotional benefits (Kim et al, 2009, Lu & Su, 2008) were verified to affect behavioral intentions for mobile marketing, while social benefits impacted on utilitarian benefits (Zhang & Mao, 2008). Benefits affecting mobile media use could also be classified as utilitarian based on several studies (Bauer et al, 2005, Cheng et al, 2009, Choi et al, 2008, Chowdhury et al, 2006, Gao et al, 2009, Haghirian & Inoue, 2007, Okazaki, 2007:2, Peters et al, 2007, Tsang et al, 2004, Xu, 2006), emotional or entertainment (Bauer et al, 2005, Choi et al, 2008, Haghirian & Inoue, 2007, Okazaki, 2007:2, Tsang et al, 2004, Xu, 2006), and socialization (Peters et al, 2007). A few comparative studies revealed results about which perceived values that affect consumer preferences for mobile media (Okazaki & Hirose, 2009, Okazaki & Romero, 2010) and mobile channels (Laukkanen, 2007, Kleinen et al, 2009) compared to PC internet. As mobile services were used in time and location specific contexts, epistemic value (novelty value) and conditional value (situational value) affected perceived value. Results showed that conditional value affected convenience, emotional, social and monetary value, while epistemic value only affected emotional and social value for both information and entertainment services, and monetary value for information services (Pilström & Brusch, 2008).

Perceived utilitarian values and benefits

The major, but not always the dominating importance of utilitarian values in mobile contexts were shown in several studies contributing to the adoption and use of mobile devices, services and marketing (Kim et al 2007, Kleinen et al, 2009, Park & SuJin, 2006, Turel et al, 2007, Yang and Jolly, 2006). Similar results showed that utilitarian benefits had a strong affect on adoption of mobile marketing (Alda´s-Manzano et al, 2009, Amin, 2008, Kim et al, 2009, Lu & Su, 2008). Instead, utilitarian values had a more dominating affect on consumer loyalty than hedonic values (Deng et al, 2010). Especially for information services convenience value was more important for repurchase intentions (Pilström & Brusch, 2008). Convenience value was also important for use of utilitarian mobile retail categories as financial services (Kleinen et al, 2009, Laukkanen, 2007). The importance of customization in mobile contexts were highlighted in a few studies. Customization increased convenience value (Xu et al, 2011), content relevance, adoption, use (Peters et al, 2007, Xu, 2006), purchase intentions (Xu et al, 2009), making mobile services and marketing less cumbersome for consumers to use. According to these results, retailers use of personal profiles or consumer databases with mobile marketing may increase convenience value, and potentially increase the competitiveness of retailers mobile marketing over time. Another example of simplification of data input methods is Japanese firms adoption of quick response industrial codes (QR codes). By scanning

this code, consumers could automatically jump to a target mobile web site without typing in the full web address (Okazaki & Romero, 2010).

For mobile push advertising credibility was the most important utilitarian benefit affecting adoption and use (Bauer et al, 2005, Choi et al, 2008, Chowdhury et al, 2006, Tsang et al, 2004, Xu, 2006), with less important weight on content relevance (Rau et al, 2011), content (Peters et al, 2007) or information (Bauer et al, 2005). Information and credibility were the most important benefits affecting use of mobile pull advertising (Haghirian & Inoue, 2007, Okazaki, 2007:2). Content reliability and quality also had a strong affect on loyalty to mobile services and marketing (Chae et al, 2002, Choi, Seol, Lee et al, 2008). The importance of credibility on consumer use of mobile advertising, created advantages for well known brands (Carroll et al, 2007), and in existing consumer relationships (Peters et al, 2007).

Perceived emotional values and benefits

The major importance of emotional values in mobile contexts were highlighted in several studies affecting adoption and use of mobile services and devices (Kim et al 2007, Kim & Hwang, 2006, Park & SuJin, 2006, Turel et al, 2007, Yang and Jolly, 2006), and loyalty to entertaining and enjoying mobile services (Cyr et al, 2006, Pilström & Brusch, 2008). The relative importance of entertainment benefits on adoption and use were verified for mobile pull advertising in several studies (Bauer et al, 2005, Choi et al, 2008, Chowdhury et al, 2006, Tsang et al, 2004, Xu, 2006), and for mobile web shopping (Lu & Su, 2008) and mobile fashion shopping (Kim et al, 2009). But entertainment benefits were not as important for mobile pull media (Haghirian & Inoue, 2007, Okazaki, 2007:2), though interactive and/or multimedia advertising were perceived as more informative, entertaining and less irritating (Cheng et al, 2009).

The importance of emotional values seemed to be consumer segment specific. Consumers' product experiences affected the relative importance of hedonic values; novice consumers rated the importance of hedonic values higher than experienced consumers (Park & SuJin, 2006). Based on Kim and Hwang (2006) emotional values may be more important for younger and less educated mobile users having more hedonic tendencies, while utilitarian values may be more important for older and more educated users having more utilitarian tendency. Emotional values also seemed to be realized in different manners in mobile contexts, and not only by fun and game like solutions. The use of entertainment services were perceived as entertaining (Pilström & Brusch, 2008), while mobile pull advertising was perceived as entertaining if it was consumed in between activities or during limited time to fill time, relax or escape (Peters et al, 2007), the design aestetics of mobile marketing (Cyr et al, 2006), or advertising

message were perceived as entertaining (Scharl et al, 2005), the ease of use of mobile shopping were perceived as entertaining (Kim et al, 2009, Lu & Su, 2008). Finally, the relative importance of entertainment values seemed to be category specific for mobile services (Pilström & Brusch, 2008) and for mobile distance selling (Kim et al, 2009, Lu & Su, 2008).

Perceived social values and benefits

Social values affect on adoption and use of mobile services showed discrepancies. Results by Turel et al (2007) and Yang and Jolly (2006) indicated low significance of social values affect on adoption and use of mobile services (Turel et al, 2007, Yang & Jolly, 2006). Instead social benefits and values seemed to influence adoption and use indirectly. Perceived social usefulness had a major impact on perceived usefulness for SMS advertising (Zhang & Mao, 2008). Subjective norms had a significant positive affect on adoption intent on mobile marketing in a few studies (Muk, 2007, Zhang & Mao, 2008). Social value also had some affect on consumer loyalty in terms of word of mouth and willingness to pay premium prices, especially for entertainment services (Pilström & Brusch, 2008).

Perceived sacrifices

The main sacrifices for consumers to adopt and use mobile services and marketing were surprisingly not perceived risks (Bauer et al, 2005, Kleinen et al, 2009, Okazaki, 2007:2, Xu et al, 2010). Instead efforts to learn and use the mobile services and marketing were the main sacrifices for consumers (Constantinou et al, 2009, Constantinou & Mahnke, 2010, Dickinger & Kleijnen, 2008, Kim et al, 2007, 2008, Turel et al, 2007). For more advanced mobile device shopping behaviors, the importance of innovativeness increased such as mobile device distance shopping (Alda's-Manzano et al, 2009, Dai & Palvia, 2009) and information disclosure in Location Aware Marketing (LAM) systems (Xu et al, 2011).

The importance of monetary costs on perceived value of mobile services differed. Monetary costs did not appear to dominate perceived value orientations in the mobile field (Pilström & Brusch, 2008, Yang & Jolly, 2006), while the effect of monetary costs on perceived value was highlighted in studies using samples dominated by students (Kim et al, 2007, Turel et al, 2007). As previous results indicated that mobile device shoppers seemed to be more affluent, monetary costs for mobile services may be assumed to have a lesser impact on these consumers value perception. For more price sensitive consumer groups mobile service costs can be a barrier to adopt a mobile device shopping behavior.

Perceived irritation was the main sacrifice affecting mobile advertising use (Carroll et al, 2009, Okazaki, 2007:2, Tsang et al, 2004), especially for mobile push advertising. Mobile push advertising were in general

perceived as negative (Choi et al, 2008, Tsang et al, 2004), as being intrusive (Carroll et al, 2009, Tsang et al, 2004), and evoking privacy concerns (Carroll et al, 2009, Peters et al, 2007). Risk perception came from fear of data misuse and reception of unwanted mobile marketing messages (Bauer et al, 2005, Carroll et al, 2009, Dickinger & Kleijnen, 2008, Peters et al, 2007). On the other hand trust in mobile advertising affected consumers' perceptions about mobile advertising, which affected the perceptions of the advertised brand (Okazaki et al, 2007). Comparing MMS with SMS, multimedia appeared to have positive effects on informativeness and entertainment. But perceived irritation was higher for multimedia push advertising (MMS) because of distraction and cognitive overload (Xu et al, 2009). Integration of SMS and multimedia pull advertising as mobile web sites, seems like a straight forward approach to minimize consumer irritation of mobile pull advertising while combining multimedia effects on informativeness and entertainment.

Consumers negative perceptions of mobile push advertising could be changed if permission was obtained (Carroll et al, 2007, Tsang et al, 2004), or if service provider filter messages (Carroll et al, 2009). If permission was obtained, consumers' evaluation would be more positive as the exposure of advertisement getting higher even for consumers not interested in the SMS advertisements (Rau et al, 2011). Frequency of messages received also affected perceptions of mobile push advertising (Carroll et al, 2007), as timing of messages (Carroll et al, 2009 , Rau et al, 2011). Low frequency of messages with low relevance were perceived as more positive than disturbing and irritating messages with high relevance (Carroll et al, 2009). For consumers with negative perceptions of mobile advertising, content relevance through personalization was the key factor making them positive towards mobile advertising (Xu, 2006), or if the advertisements were sent from a friend or community (Wais & Clemons, 2008). Finally, the value perception of mobile push advertising and intentions to receive mobile push advertisements could increase by adding incentives (Tsang et al, 2004).

Comparative perceived values and benefits

Consumers perceived media image and gratification opportunities differently, explaining consumers preferences for one media compared to others (Okazaki & Hirose, 2009, Okazaki & Romero, 2010). Mobile internet users perceived mobile devices as enjoyable and timely, and they recognize their three primary benefits: convenience (flexibility in terms of time and location), companionship and efficiency compared to PC (Okazaki & Romero, 2010). Media switching between mobile and PC internet could be explained by mobile internet became a complementary media to fixed internet in high involvement situations, while mobile internet worked as a substitute in lower involvement situations (Okazaki & Hirose, 2009). Laukkanen (2007) indicated that efficiency, convenience and safety were the most

important benefits determining differences in customer value perceptions between PC internet and mobile devices in banking. Efficiency mainly derived from service access locations and to use mobile devices wherever wanted enabled immediate action, saved time and was perceived as efficient. Convenience was a multidimensional construct, where time utilization seemed to provide convenience both for internet and mobile banking. Internet banking provided higher convenience in dimensions related to speed and ease of use of service due to the limited key board and screen size of the mobile device. Key board and screen size also affected safety aspects as uncertainty in service consumption. Convenience and safety aspects called for simplification of data input methods, especially when the service was used via a mobile device. Kleinen et al (2009) found support for mobile financial services increased value to both time conscious and self service consumers, meaning that consumers could be segmented based on service level and channel preferences in the service delivery process. For self service consumers user control over the service delivery process (consumers determining timing, content, and sequence of transactions), affected utilitarian value perceptions.

The value of mobile marketing for retailers

According to Porter (1985) value from the firm is represented by a series of activities and processes, a value chain, that provides the given level of value for consumers. The value the firm can create for its consumers, creates the foundations for the firm´s competitive advantage, resulting in higher margins. Sustainable competitive advantages built on substantial, scarce or unique resources and competences integrated in the firms' value chain creates barriers for direct competition. Mobile marketing is assumed to function as a tool improving activities in retailers' vale chain as consumer communications, service interactions and sales, resulting in improved output value and higher margins. Based on the results from previous chapter, mobile marketing supported consumer processes as prepurchase, service interactions and sales in mobile channels. Missing were results from consumer adoption, use and loyalty to mobile marketing during physical interactions in-store, and post-purchase interactions. Surprisingly, the reviewed studies based on a firm perspective were focusing on mobile marketing as an advertising tool except for Lee, Cheng and Cheng (2007), who regarded mobile marketing as a tool for front staff improving person to person interactions between insurance agents and consumers, defined as internal mobile marketing. Another exception was Nysveen, Pedersen and Berthon (2005) focusing on the mobile channel as a tool to improve consumer relationships to brands. As a consequence there was a knowledge gap covering firms' adoption, implementation of best demonstrated practice and effects of in-store and post-purchase mobile marketing. Another gap was the indirect affect of mobile marketing on other

activities in the retailers' value chain. For instance, possibilities to increase campaign frequency may increase the demand for improved purchasing and logistics. Studies of mobile advertising, may still have some relevance for other mobile marketing application areas for retailers.

In a limited number of studies values or benefits firms identified in mobile marketing to support acceptance and use, were studied from a management perspective (Komulainen, Mainela, Tähtinen et al, 2007, Okazaki, 2005, Okazaki & Taylor 2008), and from a front staff perspective (Lee, Cheng & Cheng, 2007). Based on these results an assumption is that retailers' perceived value also will affect loyalty to m-advertising services as adoption, use and loyalty to other mobile marketing application areas. Except from outcome benefits (pioneering, commercial effectiveness), Komulainen et al (2007) also identified process benefits (technical functionality, service support and feedback), and monetary and non monetary sacrifices affecting retailers' perceived value of m-advertising services. Retailers' adoption and use of m-advertising services differed by how they perceived benefits and value and differences in user's participation in value co-creation, the more the users participated the more value they seemed to perceive (Komulainen et al, 2007), and nationality (Okazaki, 2005). Similar results were presented on multinational companies intentions to use mobile advertising, which were predicted by the benefits using mobile advertising to support the branding strategy (Okazaki, 2005, Okazaki & Taylor, 2008) and to use location based marketing (Okazaki & Taylor, 2008), depending on facilitating conditions (Okazaki, 2005, Okazaki & Taylor, 2008) and restrained by security or privacy issues (Okazaki & Taylor, 2008) and costs (Okazaki, 2005). Studies of acceptance and use of mobile marketing from an organizational perspective were based on the organizational adoption model (Rogers, 1995), perceived value models for B-to-B services (Lapierre, 1997), and for front personal use of technology task-technology fit models were used (Goodhue & Thompson, 1995).

The single study of internal mobile marketing supporting personal interactions between consumers and retailers showed mobile devices being a suitable tool for insurance staff, providing a good fit for the insurance tasks. Mobile devices provided high level of assistance to post-contract customer services, followed by recruiting new insurance contracts and tax and legal information services. The insurance agents could access timely information and locate the needed data to perform their tasks (Lee et al, 2007). Based on these results the potential values of mobile marketing for retail front staff are related to their increasing efficiency and effectiveness in service interactions, increasing work capacity and quality, by increasing capacity to match consumer needs, provide information services about products and product use. With the same logic in-store mobile marketing to self-service consumers may increase effectiveness and efficiency of service interactions, limiting the need for staff interactions, still completing transactions of high perceived value.

The improved value of mobile marketing

Several studies covered mobile advertising effectiveness, the outcome value of marketing activities in the value chain, mobile push advertising (Kondo & Nakahara, 2007, Merisavo, Vesanen, Arponen et al et al, 2006, Nysveen, Pedersen & Berthon, 2005, Rettie, Grandcolas & Deakins, 200), Yeh & Lin, 2010), mobile pull advertising (Bellman, Potter, Treleaven-Hassard et al, 2011, Kim & Jun, 2008, Li & Stoller, 2007), and cross-media effects of mobile push and internet pull advertising (Wang, 2007). Results indicated improved outcome value, requirements (consumer characteristics, choice of communication appeal and endorser, choice of m-coupon design, choice of mobile application design style) for realizing these values and a few indications of relative improved outcome value of mobile advertising. Mobile advertising effectiveness studies were based on models measuring advertising communication ability (Atkin & Block, 1983) and consumer choice (Stewart, Pechmann, Ratneshwar et al, 1985). The effects of mobile channel addition was based on Geysken, Gielens, and Dekimpe (2002). The Interdependency Model (Thibaut & Kelley, 1959) and the extended Investment Model (Rusbult, 1980) were used to measure consumer brand relationships. Based on the Multiple Resource Theory (MRT) on inter-media comparisons (Wickens, 1984) and information processing literature (Calder & Sternthal, 1980, Machleit & Wilson, 1988, Moorthy & Hawkins, 2005, Pham & Vanhuele, 1997), the effects of cross-media integration of advertising were measured by media engagement (Wang, 2006), message strength (Domke, Shah, & Wackamn, 1998) and brand attitude (Maheswaran & Chaiken, 1991, Sengupta & Johar, 2002).

Early results showed high acceptance of mobile pull advertising (SMS), response rates, and purchase intentions, by far exceeding the results of direct marketing, while the branding effects were more moderate to low, for example no effect on brand attitude for 77,9% of the campaigns (Rettie et al, 2005). Mobile pull media seemed to be more effective creating category and brand interest (Bellman et al, 2011), brand recall, association (Li & Stoller, 2007), and purchase intent (Bellman et al, 2011, Li & Stoller, 2007). Mobile push advertising may substitute traditional direct marketing investments to some consumer segments increasing communication effectiveness for high and low involvement categories, products and services (Kondo & Nakahara, 2007, Merisavo et al et al, 2006, Rettie et al, 2005). Mobile push media could also be used to increase consumer loyalty measured as brand satisfaction, relationship investments and and main channel use (Nysveen, Pedersen & Berthon, 2005).

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Mobile marketing integration

In a limited number of studies the importance of integrated marketing communication were highlighted (Kim and Jun, 2008, Scharl et al, 2005, Sultan & Rohm, 2005, Wang, 2007). Reasons for cross media integration were consumers' increased engagement in processing messages, as they perceived stronger message strength from the messages and exhibited stronger brand attitude with enhanced media engagement (Wang, 2007). Note that Wang (2007) evaluated cross-media integration between SMS messages and PC internet website. Similar effects are probably achieved by combining mobile push and pull media. These results indicated stronger affects on brand perceptions among consumers integrating mobile push and pull advertising, and a potential for increasing consumer recruitment and loyalty. Examples of successful integrated mobile marketing were improving category and brand building, driving traffic to store,increasing sales, while outperforming off- and on-line advertising (Kim & Jun, 2008). Suggestions to integrate mobile media with of- and on-line media (Sultan & Rohm, 2005), created opportunities to capitalize on traditional medias high reach and impact with mobile medias possibilities to interact with individuals and drive traffic to store. For higher involvement categories mobile media integration with low location dependency media (TV, magazines, PC internet) may be suitable, as it can support more planned purchasing behaviors, while integration with high location dependency media (billboards, out of home media use) may be more suitable for less planned purchasing behavior, or for purchasing behavior where choice of brand or retailer is decided close to purchase. Suggestion to integrate products, packages and mobile marketing to support consumers' decision making in-store and influence sales with in-store mobile coupons (Sultan & Rohm, 2005), may be valid for post-purchase interactions supporting consumers' use and knowledge of products and brands.

Realizing potential value in mobile marketing

A limited number of studies presented findings on how firms could realize potentials in mobile marketing, describing best demonstrated practice on how to implement successful mobile marketing, and resources and competences to facilitate such actions (Kim & Jun, 2008, Scharl et al, 2005, Salo, Sinsalo & Karjalouto, 2008, Sultan & Rohm, 2005, Sultan & Rohm, 2008). Results indicated the need for a marketing strategy review and structural changes of partner networks, organizations and IT-structure for retailers to fully capitalize on mobile marketing potentials. Theoretical frameworks for studies describing resources and competences for successful mobile marketing implementation, were based on m-marketing (m-advertising) value chain (Leppäniemi et al, 2004), wireless network value chain (Kannan et al, 2001), and network theory (Awuah, 2001, Jarillo, 1988, Möller & Svahn, 2003).

For firms to create value out of mobile marketing implementation, developing a value chain of partners to require those substantial resource were needed to take advantage of mobile marketing's unique capabilities (Salo et al, 2008, Sultan & Rohm, 2005). Important partners were consulting agency, especially for novice companies when initiating mobile marketing activities (Salo et al, 2008), and mobile content providers in both emerging and already established m-marketing networks (Salo et al, 2008, Sultan & Rohm, 2005). Organizational changes due to mobile marketing implementation may also be needed, as for instance context-aware mobile advertising needed to be planned locally, compared to headquarter-planned, traditional media campaigns (Komulainen et al, 2007). For managing consumer heterogeneity mobile marketing needs to be personalized or at least require narrow segmentation. Retailers needed to integrate consumer databases (Sultan & Rohm, 2005) and mobile platform with back-end solutions to take full advantage of the mobile platform. As these results were based on mobile advertising, the general need for combining resources and capabilities are probably similar for in-store and post purchase marketing. But if other kinds of partners, resources and capabilities are needed in the network, the literature revealed less about. Other success factors for mobile advertising (SMS) campaigns, and potentially for post-purchase communications, were related to message content (Kim & Jun, 2008, Scharl et al, 2005, Sultan & Rohm, 2005), management of media issues as device development, fluctuating quality of transmission processing, product fit and media costs (Scharl et al, 2005), measurement (Sultan & Rohm, 2005), and global campaign launch strategies (Sultan & Rohm, 2008). A "soft" launch of a mobile campaign in developing markets, offered opportunities to use the results to adjust and launch the campaign in a more mature market (Sultan & Rohm, 2008). For internal mobile marketing, staffs' computer self-efficacy was found to be the major factor of impacting the task–technology fit, while education, position experience, and cognitive style are found to impact certain factors of the task–technology fit (Lee et al, 2007). Results were similar to consumer acceptance and use of mobile marketing.

Mobile marketing metrics

Commercial effectiveness of m-advertising was often evaluated in the same terms as traditional media (Komulainen et al, 2007). Instead an integration of traditional and non-traditional measures were needed (Li & Stoller 2007), brand awareness and attitude, consumer responses at the retail or transaction level, as well as viral effect of mobile-marketing messages (Sultan & Rohm, 2005). As an extension of these results, in-store and internal mobile marketing may also include measurements of store effectiveness as conversion rates, up- and cross sale as consumer value and satisfaction? With a similar logic retailers mobile marketing supporting consumer post purchase brand inter-

action and product use may include measures of loyalty effects (attitude as behavioral based loyalty), value of and satisfaction with product use and support.

DISCUSSION

Initiating the value creation process to consumers, mobile device shoppers may be considered as multiple segments (Okazaki, 2007:2, Okazaki & Romero, 2010), further segmented based on at least gender (Constantinou & Mahnke, 2010, Deng et al, 2010, Okazaki, 2007:1), age (Barutcu, 2007, Deng et al, 2010), and cultural differences (Choi et al, 2008, Constantinou et al, 2009, Dai & Palvia, 2009, Muk, 2007). These consumers could represent substantial value for retailers due to their higher spending power (Barutcu, 2007, Okazaki, 2007:2). Even though their mobile shopping behaviors were far from explored, some indications were found that mobile device shopping may be an extension of internet shopping behaviors. These segments consisted of high fractions of savvy PC internet (Alda's-Manzano et al, 2009, Deng et al, 2010, Kleinen et al, 2009, Lin & Wang, 2006, Lu & Su, 2008, Okazaki, 2007:1) and mobile device users (Alda's-Manzano et al, 2009, Roach, 2009), had higher knowledge and self-efficacy (Moynihan et al, 2010), an exploratory search behavior (Wang & Acar, 2006), were more involved and/or more price-conscious, and had higher education (Barutcu, 2007). Based on Kleinen et al (2009) mobile marketing offered opportunities for retailers for segmentation of consumers in-store and for post-purchase services based on time consciousness and self service needs, improving perceived value, and potentially retailers' outcome value based on Lee et al (2007). Differences between existing and potential mobile device shoppers, were not identified in the reviewed literature.

Mobile marketing delivered utilitarian, emotional/entertainment/ hedonic and social values to consumers (Kim et al, 2007, Pilström & Brusch, 2008, Turel et al, 2007, Yang & Jolly, 2006). The relative importance of each value or benefit construct differed between mobile media or channel types (Bauer et al, 2005, Choi et al, 2008, Chowdhury et al, 2006, Haghirian & Inoue, 2007, Okazaki, 2007:2, Tsang et al, 2004, Xu, 2006, utilitarian or emotional category (Kim et al, 2009, Lu & Su, 2008, Pilström & Brusch, 2008), and context (Pilström & Brusch, 2008). How consumers use mobile media and channels, PC internet and store network for shopping, and what value each channel type delivered in different shopping context, the reviewed literature revealed less about. Mobile media or channels may be preferred by consumers in shopping situations filling spare time (Peters et al, 2007) remote from PC or in situations were PC is unpractical to use, such as traveling, on coffee brakes, or while consuming traditional media, creating higher emotional values (Peters et al, 2007). Other potential situations are when consumers are on the go and external stimuli are arousing interest for specific content, or when close to and during store

visits, or during product use. In these situations mobile media or channels may deliver higher efficiency (Kleinen et al, 2009, Laukkanen, 2007), and time and location convenience (Kleinen et al, 2009). For information search in higher involvement categories, PC internet was preferred (Okazaki & Romero, 2010) due to screen size, easier navigation and data input (Laukkanen, 2007), and as an alternative to stores for completing of transactions. Mobile marketing may be an adequate tool for retailers to use in lower involvement categories and as a complement to PC internet in higher involvement categories (Okazaki & Romero, 2010). Eventually, the development of mobile devices and interfaces will affect consumers using mobile internet to a greater extent in higher involvement situations. In summary, mobile marketing may be perceived differently in different shopping contexts, resulting in different affects on retailers' outcome value. Even though social values did not directly affect adoption, use of and had a minor affect on loyalty to mobile marketing (Muk, 2007, Pilström & Brusch, 2008, Zhang & Mao, 2008), retailers should not underestimate the potential importance of social values in creating loyalty effects as word of mouth or viral marketing (Wais & Clemons, 2008). Social values of mobile media and channels may be more important for emotional categories (Pilström & Brusch, 2008), as consumers may feel need for social approval for, or supporting social status of brand and product choices.

Mobile marketing affects on retailers' generic, growth and offering strategies were not covered by the reviewed studies, potentially increasing value to consumers. Rettie et al (2005) verified increased outcome value of mobile push advertising compared to direct marketing for firms, while integration of mobile push and pull advertising outperformed traditional advertising (Kim & Jun, 2008). Indications of increased outcome value of retail front staff using internal mobile marketing were presented by Lee et al (2007). By channel addition mobile push advertising could increase loyalty to main channel (Nysveen, Pedersen & Berthon, 2005), while mobile pull media increased branding effects (Bellman, et al, 2011, Li & Stoller, 2007), the foundations for increased loyalty to retailers. Based on these results mobile channels seems to be a tool supporting all consumer processes (pre-purchase, service delivery and purchase, post-purchase), but initially and to a lesser extent, ordering and payments.

Based on Okazaki et al (2007) mobile marketing seemed to affect retailers' brand positioning, but how mobile marketing values affected brand associations and positioning the literature revealed less about. The downsides of mobile push advertising (Bauer et al, 2005, Carroll et al, 2009, Dickinger & Kleijnen, 2008, Peters et al, 2007, Tsang et al, 2004) limited communication frequency and choices of target groups to consumers with high brand awareness (Carroll et al, 2009), especially existing customers (Peters et al, 2007) permitting to receive mobile push advertising, and by as-

sumption during campaign periods when brand awareness increase. A consequence of these results are requirements of complementing tools for consumers' opt-in to retailers mobile marketing. A limited number of studies highlighted the importance of integrating mobile marketing communication (Kim & Jun, 2008, Scharl et al, 2005, Sultan & Rohm, 2005), identification of segments of dual internet (PC and mobile internet) user (Okazaki & Romero, 2010), reasons for media switching between PC and mobile internet (Okazaki & Hirose, 2009), verification of increased outcome value of mobile marketing integration (Wang, 2007), and indications of increased relative outcome value of mobile marketing integration (Kim & Jun, 2008). These results implied that all marketing communications may be integrated with mobile marketing, off-line and on-line, supporting pre- and post-purchase interactions, to increase retailers' outcome value. Suggestions to integrate mobile marketing with products and packages (Sultan & Rohm, 2005), makes mobile marketing a part of the augmented product. To support consumers' opt-in to retailers' in-store mobile marketing, promotion material in-store may need to be integrated with mobile marketing. As a consequence mobile marketing may be fully integrated in retailers' consumer interfaces to reach it's full potentials.

For retailers to develop a mobile marketing value chain, they had to manage a partner network (Salo et al, 2008, Sultan & Rohm, 2005), structural changes of IT-structure (Sultan & Rohm, 2005) and organizations based on Komulainen et al (2007). These results implied that mobile marketing implementation may be a major change project, requiring network partners not only to contribute to retailers' outcome value but to process benefits and reduction of non monetary sacrifices, considering retailers' participation in value co-creation (Komulainen et al, 2007) and nationality (Okazaki, 2005), implying high degree of customization and development of structural bonds between network partners. The evaluation of mobile marketing was problematic, lacking established measures for the effectiveness of mobile marketing (Sultan & Rohm, 2005), especially for other application areas than mobile advertising. Mobile marketing also provides retailers with contextual consumer data on individual level, potentially fueling retailers with additional data to improve actions and results, however less studied. On a tactical level retailers needed to manage message content (Kim & Jun, 2008, Scharl et al, 2005, Sultan & Rohm, 2005), management of media issues as device development, fluctuating quality of transmission processing, product fit and media costs (Scharl et al, 2005), and global campaign launch strategies (Sultan & Rohm, 2008), at least for mobile advertising and potentially for post-purchase communications. Message content development is different from PC internet due to limited screens size and navigation of mobile devices, and surrounding noise depending on user context. This probably calls for simplification of mobile content. Further, content development differ between mobile media (text only with text space limitations or interactive multimedia with lesser restrictions for information) and communications, transactions or services goals. Management of media issues are similar between application areas, except for fluctuating quality of transmission processing and access to mobile networks, which partly could be influenced by retailers investments in infrastructure in store network and affecting in-store mobile marketing accessibility and quality. For internal-, and by assumption in-store mobile marketing, retailers needed to consider computer self-efficacy education, position experience, and cognitive (Lee et al, 2007) recruiting and developing store staff. Successful in-store mobile marketing to consumers may require successful internal mobile marketing to store staff first, using store staff as ambassadors supporting consumers' use of in-store mobile marketing.

The reviewed literature verified the importance of perceived values regarding consumers' adoption, use (Constantinou, Papazafeiropoulou & Vendelø, 2009, Constantinou & Mahnke, 2010, Dai & Palvia, 2009, Kim, Chan & Gupta, 2007, Kim & Hwang, 2006, Kleinen, de Reuter & Wetzels, 2009, Laukkanen, 2007, Mahatanankoon, Wen, & Lim, 2005, Park & SuJin, 2006, Turel, Serenko & Bontis, 2007, Xu, Oh & Teo, 2009, Xu, Lou, Carroll et al, 2011, Yang and Jolly, 2006), and loyalty to retailers mobile marketing (Deng, Lu, Wei et al, 2010, Lin & Wang, 2006, Pilström & Brusch, 2008), and indicated the importance on retailers' adoption and use (Komulainen et al, 2007, Lee et al, 2007 Okazaki, 2005, Okazaki & Taylor 2008). But the path between consumer perceived value of mobile marketing and affect on outcome value for firms were not verified. However, some evidences were presented that consumers' use of mobile marketing affected firms' outcome value (Bellman et al, 2011, Kondo & Nakahara, 2007, Li & Stoller, 2007, Merisavo et al et al, 2006), while mobile marketing increased relative perceived value or benefits for consumers (Kleinen et al, 2009, Laukkanen, 2007, Okazaki & Hirose, 2009, Okazaki & Romero, 2010), and increased firms' relative outcome value (Kim & Jun, 2008, Rettie et al, 2005). Consumer perceived value of mobile marketing could be increased by minimizing consumers' sacrifices (ease of use and irritation) to use mobile marketing, by customization (Peters et al, 2007, Xu, 2006, Xu et al, 2011), by providing easy opt-in to specific content or services relevant for consumers (Okazaki & Romero, 2010), streamlining information search, access and sharing, and avoiding irritating push messages (Carroll et al, 2009, Tsang et al, 2004). Value perceptions of mobile marketing also differed between consumers (Kim & Hwang, 2006, Park & SuJin, 2006), and firms (Komulainen et al, 2007, Lee et al, 2007 Okazaki, 2005, Okazaki & Taylor 2008).

The majority of the reviewed studies regarded mobile marketing as an advertising media, especially for mobile push advertising. In a few studies mobile marketing was regarded as a distance selling or self service

channel. One study focused on internal mobile marketing (Table 4). From a retail perspective there is a need for studies of mobile pull media, especially as internal-, in-store and mobile marketing supporting consumer relationships and profitability. Most consumer studies focused on mobile marketing adoption and use, while only a few studies on consumer loyalty to mobile marketing indicated the need for such studies (Table 1-2). To align consumer perceived value of mobile marketing with retailers' relative outcome value, experimental design may be a solution. The majority of the selected studies used a quantitative approach (Table 1-3). Qualitative consumer studies such as observation studies in specific shopping contexts or more consumer anthropological or ethnological approaches, may help gaining insights about mobile device shopping behaviors. Far more focus has been on consumer studies than on firm studies. Case studies may increase the in depth knowledge about mobile marketing implementation and the effects on activities, processes etc., and identify drivers and barriers for retailers' mobile marketing implementation.

CONCLUSIONS

The purpose of this literature review was to describe existing knowledge on how mobile marketing can increase value for consumers and retailers. The review revealed multiple support for mobile marketing increasing perceived value for consumers and outcome value for retailers. However, only a limited number of studies supported mobile marketing as more effective than retailers' alternative marketing investments, delivering higher relative perceived value to consumers and higher relative outcome value for retailers. Though not verified, several studies indicated the path between consumer perceived values of mobile marketing affecting adoption, use and loyalty to retailers' mobile marketing, and increasing relative outcome value of retailers' mobile marketing. Mobile marketing may initially support consumers' and retailers' interactions during pre-purchase, service delivery in-store, and post-purchase, but to a lesser extent mobile transactions as consumers perceived them as more risky. An interesting aspect was that mobile marketing seemed to increase retailers' outcome value of existing media choices, channels, assortments, and services by the effects of channel addition and integration.

The reviewed literature revealed limited knowledge about mobile device shopping behaviors, restricted to mobile advertising and retail services usage. Mobile device shoppers may be considered as multiple segments and potentially valuable to retailers, due to higher income and/or education. Knowledge of effective segmentation approaches for these consumers were limited to traditional background data. Indications of mobile device shopping may be an extension of PC internet shopping behaviors were identified. Mobile marketing delivered multiple perceived values to consumers (utilitarian, emotional/entertainment/ hedonic

and social values), and relative benefits and values of mobile devices (enjoyable, timely and offered companionship) and marketing (efficiency, time and location convenience) compared to PC internet. These values and benefits may be perceived differently dependent on shopping context, and seemed to have some affect on retailers' brand positioning.

Several indications supported the logic for integrations of retailers' entire consumer interfaces with mobile marketing, maximizing exposure and connectivity to retailers, managing consumers' cross media and channel use, supporting self-segmentation of consumers, increasing perceived value to consumers and outcome value of retailers. Indications of mobile marketing implementation functioning as foundations for sustainable competitive advantages were found, development of partner network and structural bonds within partner networks, and structural changes of IT-structure and organizations. Initiating the mobile marketing development, retailers' needed to manage mobile content, management of media issues as device development, fluctuating quality of transmission processing, product fit and media costs, global launch strategies, at least for mobile advertising and potentially for post purchase communications. For internal, and by assumptions for in-store mobile marketing, retailers' also needed to consider computer self-efficacy, education, position experience, and cognitive style of store staff.

Managerial implications

Mobile marketing implementation may be a tactical decision, adding another media to improve single media effectiveness. But the potentials of mobile marketing seems to be in integration with entire consumer interfaces. Mobile device shoppers may be valuable segments for retailers. By opt-in to retailers' mobile marketing they may be even more valuable. Retailers can deliver higher perceived value to these consumers, potentially affecting recruitment, loyalty and results. By opt-in to retailers' mobile marketing individual consumers are identified, behaviors traceable, perceptions, actions and relationships are more affectable, maximizing retailers' exposure and connectivity independent of time and place, and increase the value of existing marketing investments.

For retailers primary relying on their store network, mobile marketing may seem like a Gordian Knot. Mobile marketing seems to offer opportunities for increased consumer connectivity to retailers, increasing outcome value and potentially sustainable competitiveness. On the other hand it demands substantial resources for change processes, while mobile marketing may increase price competition from competing retailers and distance sellers encountering the physical environment [2]. The worst case scenario is consumers using retailers' shop network as show rooms, and then use mobile devices to buy from the cheapest alternative on spot, in store. This scenario is probably more likely

for retailers in higher involvement categories offering supplier branded products without exclusive distribution. Mobile marketing may then affect other strategic decisions for retailers'. An alternative approach to an overall structural change implementing mobile marketing, is identifying application areas with high impact on consumer perceived and retailers' outcome value, requiring minimum investments and organizational changes, stepwise moving on to more demanding application areas while learning the new technology and consumer shopping behaviors.

Implications for further research

As the reviewed literature's contribution to evidences that consumer perceived value of mobile marketing affected retailers' outcome value, and mobile marketing increased relative value for consumers and retailers were limited, several key areas calling for further research have emerged. These are listed under four headings: mobile device shopping, the relative outcome value of mobile marketing, mobile marketing value creation, and mobile marketing metrics.

Mobile device shopping – There is a need to know more about what kind of mobile device behaviors consumers use while shopping, why the use it, what devices they use, in what context they use it, usage levels, media and channel switching and who they are. Such knowledge can be used to estimate diffusion patterns of such behaviors and to identify new and increase usage of existing mobile device shoppers.

The relative outcome value of mobile marketing - There is a lack of studies measuring the relative outcome value of mobile marketing. Of a certain interest is aligning consumer perceived value with outcome value of mobile marketing. In general the lack of comparative results measuring effects of mobile marketing compared to retailers other investment opportunities are problematic, as evidence for improved relative output value of mobile marketing was found in the review to be one of the major factors driving mobile marketing adoption and implementation in organizations.

Mobile marketing value creation - Mobile marketing is rather new way of communicating and interacting with consumers For that reason there is a need for more studies on mobile marketing implementation for retailers. Application areas of a certain interest for retailers, and less studied, are in-store and post-purchase mobile marketing, especially when integrated with other of- and on line communications, products, packages etc.. The role and importance of a partner network should also consider other mobile marketing application areas relevant for retailers than mobile advertising. Other aspects are barriers and drivers for mobile marketing implementation for retailers.

Mobile marketing metrics - In order to evaluate the effectiveness and efficiency of mobile marketing practices, align it with over all results, and determine the most effective ways of mobile marketing, more empirically oriented research is needed.

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REFERENCES

Alda's-Manzano, J., Ruiz-Mafe´, C. & Sanz-Blas, S. (2009): "Exploring individual personality factors as drivers of M-shopping acceptance", Industrial Management & Data Systems Vol. 109 No. 6, pp. 739-757

Assael, H. (1987): Consumer behavior and marketing action, Boston, Kent Publishing Company.

Atkin, C (1973): "Instrumental utilities and information seeking", in: New Models for Mass Communication Research, Clarke, P. (ed.), Sage, London, pp. 205-242.

Atkin, C. & Block, M. (1983): "Effectiveness of celebrity endorsers", Journal of Advertising Research, Vol 23 no 1, pp. 57-61.

Awuah, G. (2001): "A firm's competence development through its network of exchange relationships", Journal of Business & Industrial Marketing, Vol. 16 No. 7, pp. 574-99.

Bakos, J. Y. (1997): "Reducing buyer search costs: Implications for electronic marketplaces", Management Science, Vol. 43 No. 12, pp. 1679-1692

Balasubramanian, S., Peterson, R. A. & Jarvenpaa, S. L. (2002): "Exploring the implications of m-commerce for markets and marketing", Academy of Marketing Science Journal, Vol. 30 No. 4, pp. 348-361

Barnes, S.J. (2002): "The mobile commerce value chain: Analysis and future developments", International Journal of Information Management, Vol. 22, pp. 91–108

Barutcu, S. (2007): "Attitudes towards mobile marketing tools: A study of Turkish consumers", Journal of Targeting, Measurement and Analysis for Marketing, Vol. 16, pp. 26–38.

Bauer, H. H, Reichardt, T., Barnes, S. J. & Neumann,

M. M. (2005): "Driving consumer acceptance of mobile marketing: A theoretical framework and empirical study", Journal of Electronic Commerce Research, Vol. 6 No. 3, pp. 181-192

Bellman, S., Potter, R. F., Treleaven-Hassard, S., Robinson, J. A. & Varan, D. (2011): "The Effectiveness of Branded Mobile Phone Apps", Journal of Interactive Marketing, Vol. 25, pp. 191–200

Beatty, S., E. & Smith, S., M. (1987): "External search effort: an investigation across several product categories", Journal of Consumer Research, Vol. 14 (June), pp. 83-95.

Bruner, G. C. & Kumar, A. (2005): "Explaining consumer acceptance of handheld Internet devices", Journal of Business Research, Vol. 58, pp. 553– 558

Brynjolfsson, E. & Smith, M. D. (2000): "Frictionless commerce? A comparison of Internet and conventional retailers", Management Science; Vol. 46 No. 4, pp. 563-585

Brynjolfsson, E. Hu, Y. J. & Smith, M. D. (2003): "Consumer surplus in the digital economy: Estimating the value of increased product variety at online booksellers", Management Science, Vol. 49 No. 11, pp. 1580-1596

Buellingen, F. & Woerter, M. (2004): "Development perspectives, firm strategies and applications in mobile commerce", Journal of Business Research, Vol. 57, pp. 1402– 1408

Calder, B. J. & Sternthal, B. (1980): "Television commercial wearout: An information processing view", Journal of Marketing Research, Vol 17 No 2, pp. 173-186.

Carroll, A., Barnes, S. J., Scornavacca, E. & Fletcher, K. (2007): "Consumer perceptions and attitudes towards SMS advertising: Recent evidence from New Zealand", International Journal of Advertising, Vol. 26 No. 1, pp. 79–98.

Chae, M., Kim, J., Kim, H., & Ryu, H. (2002): "Information quality for mobile internet services: A theoretical model with empirical validation", Electronic Markets, Vol. 12 No. 1, pp. 38–46.

Chen, L. (2008): "A model of consumer acceptance of mobile payment", International Journal of Mobile Communications, Vol. 6 No. 1, pp. 32–52.

Chen, L. D. & Nath, R. (2004): "A framework for mobile business applications", International Journal of Mobile Communications, Vol. 2 No 4, pp. 368-381

Cheng, J. M.-S., Blankson, C., Wang, E. S.-T. & Chen, L. S.-L. (2009): "Consumer attitudes and interactive digital advertising", International Journal of Advertising, Vol. 28 No. 3, pp. 501–525

Choi, Y. K., Hwang, J.-S. & McMillan, S., J. (2008): "Gearing up for mobile advertising: A cross-cultural examination of key factors that drive mobile messages home to consumers", Psychology & Marketing, Vol. 25 No. 8, pp. 756–768

Choi, J., Seol, H., Lee, S., Cho, H., & Park, Y. (2008): "Customer satisfaction factors of mobile commerce in Korea", Internet Research, Vol. 18 No. 3, pp. 313–335.

Constantinou, I. D., Papazafeiropoulou, A. & Vendelø, M. T. (2009): "Does culture affect the adoption of advanced mobile services? A comparative study of young adults' perceptions in Denmark and the UK", The DATA BASE for Advances in Information Systems, Vol. 40, No 4, pp. 132-147

Constantinou, I. D. & Mahnke, V. (2010): "Consumer behaviour and mobile TV services: Do men differ from women in their adoption intentions", Journal of Electronic Commerce Research, Vol. 11 No. 2, pp. 127-139

Court, D, Elzinga, D. Mulder, S. & Vetvik, O. J. (2009): "The consumer decision journey", McKinsey Quarterly

Chowdhury, H. K., Parvin, N., Weitenberner, C. & Becker, M. (2006): "Consumer attitude toward mobile advertising in an emerging market: An empirical study", International Journal of Mobile Marketing, Vol. 1 No. 2, pp. 33–42.

Cyr, D., Head, M. & Ivanov, A. (2006):" Design aesthetics leading to m-loyalty in mobile commerce", Information & Management, Vol. 43, pp. 950–963.

Dai, H. & Palvia, P. C. (2009): "Mobile commerce adoption in China and in the United States: a cross cultural study", The DATA BASE for Advances in Information Systems, Vol. 40 No 4, pp. 43-61

Daugherty, T., Li, H. & Biocca, F. (2008): "Consumer learning and the effects of virtual experience relative to indirect and direct product experience", Psychology & Marketing, Vol. 25 No. 7, pp. 568–586

Davis, F. D. (1989): "Perceived usefulness, perceived ease of use and user acceptance of information technology", MIS Quarterly, Vol 12 No 3, pp. 319-339

de Chernatony, L., Harris, F. & Dall'Olmo Riley, F. (2000), "Added value: its nature, roles and sustainability", European Journal of Marketing, Vol. 34 Nos 1/2, pp. 39-56.

Deng, Z., Lu, Y., Wei, K. K. & Zhang, J. (2010): "Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China",

International Journal of Information Management, Vol. 30, pp. 289–300.

Dholakia, R. R. & Dholakia, N. (2004): "Mobility and markets: emerging outlines of m-commerce", Journal of Business Research, Vol. 57, pp. 1391– 1396

Dickinger, A. & Kleijnen, M. (2008): "Coupons going wireless: Determinants of consumer intentions to redeem mobile coupons", Journal of Interactive Marketing, Vol. 22 No. 3, pp. 23-39

Domke, D., Shah, D. V. & Wackamn, D. B. (1998): "Media priming effects: Accessibility, association, and activation", International Journal of Public Opinion Research, Vol 10 No 1, pp. 51-74.

Edelman, D. C. (2010): "Branding in The Digital Age: You're Spending Your Money In All the Wrong Places", Harvard Business Review, Vol. 88 No. 12, pp. 62-+

Figge, S. (2004): "Situation-dependent services: A challenge for mobile network operators", Journal of Business Research, Vol. 57, pp. 1416– 1422

Fishbein, M. & Ajzen, I. (1975): Belief, Attitude, Intention and Behavior; An Introduction to Theory and Research, Addison-Wesley, Reading, MA

Frolick, M. N. & Chen, L. (2004): "Assessing m-commerce opportunities", Information Systems Management, Vol. 21 No 2, pp. 53-61

Gao, Q., Rau, P.-L. P. & Salvendy, G. (2009): "Perception of interactivity: Affects of four key variables in mobile advertising", International Journal of Human-Computer Interaction, Vol. 25 No. 6, pp. 479-505

Goodhue, D.,L. & Thompson R.,L. (1995): "Task–technology fit and individual performance", MIS Quarterly, Vol 19 No. 2, pp. 213– 236.

Geysken, I., Gielens, K. & Dekimpe, M. G. (2002): "The market valuation of internet channel addition," Journal of Marketing, Vol 66 (April), 102-19.

Haghirian, P. & Inoue, A. (2007): "An advanced model of consumer attitudes toward advertising on the mobile internet", International Journal of Mobile Communications, Vol. 5 No. 1, pp. 48–67.

Jarillo, J. C. (1988): "On strategic networks", Strategic Management Journal, Vol. 9 No. 1, pp. 31-41.

Jayawardhena, C., Kuckertz, A. & Karjaluoto, H. & Kautonen T. (2009): "Antecedents to permission based mobile marketing: an initial examination", European Journal of Marketing, Vol. 43 No. 3/4, pp. 473-499

Kannan, P. K., Chang, A.-M. and Whinston, A. B. (2001): "Wireless commerce: marketing issues and possibilities", Proceedings of the 34th Hawaii International Conference on System Sciences, Hawaii, IEEE, Piscataway, NJ, June, available at: http://ieeexplore.ieee.org/iel5/7255/20032/ 00927209.pdf

Kim, H., Chan, H. C. & Gupta, S: (2007): "Value-based adoption of mobile internet: An empirical investigation", Decision Support Systems, Vol. 43 No. 1, pp. 111–126

Kim, D. J., & Hwang, Y. (2006): "A study of mobile internet usage from utilitarian and hedonic user tendency perspectives", In Proceedings of the Twelfth Americas Conference on Information Systems.

Kim, M. J. & Jun, J.W. (2008): "A case study of mobile advertising in South Korea: Personalization and digital multimedia broadcasting (DMB)", Journal of Targeting, Measurement and Analysis for Marketing", Vol. 16, pp. 129 – 138

Kleinen, M., de Reuter, K. & Wetzels, M. (2009: "An assessment of value creation in mobile service delivery and the moderating role of time consciousness", Journal of Retailing, Vol 83 No 1, pp. 33–46

Komulainen, H., Mainela, T., Tähtinen, J. & Ulkuniemi, P. (2007): "Retailers' different value perceptions of mobile advertising service", International Journal of Service Industry Management, Vol. 18 No. 4, pp. 368–393.

Kondo, F. N. & Nakahara, M. (2007): "Differences in customers' responsiveness to mobile direct mail coupon promotions", International Journal of Mobile Marketing, Vol. 2 No 2, pp. 68–74

Kumar, S. & Zahn, C. (2003): "Mobile communications: Evolution and impact on business operations", Technovation, Vol. 23, pp. 515–520

Lapierre, J. (1997), "What does value mean in business-to-business professional services?", International Journal of Service Industry Management, Vol. 8 No. 5, pp. 377-97.

Laukkanen, T. (2007): "Internet vs mobile banking: Comparing customer value perceptions", Business Process Management Journal Vol. 13 No. 6, pp. 788-797

Lee, C., Cheng, H. K. & Cheng, H. (2007): "An empirical study of mobile commerce in insurance industry", Task-technology fit and individual differences, Decision Support Systems, Vol. 43 No.1, pp. 95–110.

Leo Burnett & Arc Worldwide (2011): "A mobile shopper research study"

Li, H. & Stoller, B. (2007): "Parameters of mobile ad-

14

vertising: A field experiment", International Journal of Mobile Marketing, Vol. 2 No. 1, pp. 4–11.

Lin, H.-H. & Wang, Y.-S. (2006): "An examination of the determinants of customer loyalty in mobile commerce contexts", Information & Management, Vol. 43 No. 3, 271–282.

Lynch, Jr. J. G. & Ariely, D. (2000): "Wine online: Search costs affect competition on price, quality, and distribution", Marketing Science, Vol. 19 No. 1, pp. 83-103

Leppäniemi, M., Karjaluoto, H. & Salo, J. (2004), "The success factors of mobile advertising value chain", E-Business Review, Vol. 4, pp. 93-97

Machleit, K. A. & Wilson R. D. (1988): "Emotional feelings and attitude toward the advertisement: The roles of brand familiarity and repetition." Journal of Advertising, Vol 17 No 3, pp. 27-35.

Mahatanankoon, P., Wen, H. J., & Lim, B. (2005): "Consumer-based m-commerce: exploring consumer perception of mobile applications", Computer Standards & Interfaces, Vol. 27 No. 4, pp. 347–357.

Maheswaran, D. & Chaiken, S. (1991): "Promoting systematic processing in low-involvement settings: Effect of incongruent information on processing and judgment", Journal of Personality and Social Psychology, Vol 61 No 1, pp. 13-25.

Mahmoud, Q. H. & Yu, L. (2006): "Havana agents for comparison shopping and location-aware advertising in wireless mobile environments", Electronic Commerce Research and Applications, Vol. 5, pp. 220–228

Malladi, R. & Agrawal, D. P. (2002): "Current and future applications of mobile and wireless networks", Communications of the ACM, Vol. 45 No. 10, pp. 144–146.

Mamaar, Z. (2003): "Commerce, E-Commerce, and M-Commerce: What Comes Next?", Communications of the ACM, Vol. 46, No. 12, pp. 251-257

Merisavo, M., Vesanen, J., Arponen, A. & Kajalo, S. (2006): "The effectiveness of targeted mobile advertising in selling mobile services: An empirical study", International Journal of Mobile Communications, Vol, 4 No. 2, pp. 119–127.

Moorthy, S. & Hawkins S. A. (2005): "Advertising repetition and quality perceptions", Journal of Business Research, Vol 58 No 3, pp. 354-360.

Moynihan, B., Kabadayi, S. & Kaiser, M. (2010): "Consumer acceptance of SMS advertising: A study of American and Turkish consumers", International Journal of Mobile Communications, Vol. 8 No. 4, pp. 392-

410

Möller, K., Rajala, A. & Svahn, S. (2005), "Strategic business nets – their type and management", Journal of Business Research, Vol. 58 No. 9, pp. 1274-84.

Nysveen, H., Pedersen, P. E., & Thorbjørnsen, H. (2005): "Intentions to use mobile services: Antecedents and cross-service comparisons", Journal of the Academy of Marketing Science, Vol. 33 No. 3, pp. 330–347.

Nysveen, H., Pedersen, P. E. & Berthon, P. (2005:1): "Mobilizing the brand : The effects of mobile services on brand relationships and main channel use", Journal of Service Research, Vol. 7 No. 3, pp. 257-276

Okazaki, S. (2005): "Mobile advertising adoption by multinationals", Internet Research, Vol. 15 No. 2, pp. 160–180.

Okazaki, S. (2007:1): "Exploring Gender Effects in a Mobile Advertising Context: On the Evaluation of Trust, Attitudes, and Recall", Sex Roles, Vol. 57, pp. 897–908

Okazaki, S. (2007:2): "Lessons learned from i-mode: What makes consumers click wireless banner ads?", Computers in Human Behavior, Vol. 23, pp. 1692–1719

Okazaki, S., Katsukura, A., & Nishiyama, M. (2007): "How mobile advertising works: The role of trust in improving attitudes and recall", Journal of Advertising Research, Vol. 47 No 2, pp. 165–178

Okazaki, S. & Hirose, M. (2009): "Effects of displacement-reinforcement between traditional media, PC internet and mobile internet: A quasi experiment in Japan", International Journal of Advertising, Vol. 28 No. 1, pp. 77-104

Okazaki, S. & Romero, J. (2010): "Online media rivalry: A latent class model for mobile and PC internet users", Online Information Review, Vol. 34 No. 1, pp. 98-114

Okazaki, S. & Taylor, C. R. (2008): "What is SMS advertising and why do multinationals adopt it? Answers from an empirical study in European markets", Journal of Business Research, Vol. 61 No. 1, pp. 4–12.

Parasuraman, A. (1997), "Reflections on gaining competitive advantage through customer value", Academy of Marketing Science, Vol. 25 No. 2, pp. 154-61.

Park, J. & SuJin, Y. (2006): "The moderating role of consumer trust and experiences: Value driven usage of mobile technology", International Journal of Mobile Marketing, Vol, 1 No. 2, pp. 24–32.

Peters, C., Amato, C., H. & Hollenbeck, C., R. (2007): "An exploratory investigation of consumers' perceptions of wireless advertising", Journal of Advertising, Vol. 36, No.4, pp. 129-145

Pham, M. T. & Vanhuele, M. (1997): "Analyzing the memory impact of advertising fragments", Marketing Letters, Vol 8 No 4, pp. 407-417.

Pilström, M. & Brusch, G., J. (2008): "Comparing the perceived value of information and entertainment mobile services", Psychology & Marketing, Vol. 25(8): 732–755.

Porter, M. E. (1985): The Competitive Advantage: Creating and Sustaining Superior Performance, N.Y., Free Press

Rau, P.-L. P., Zhang, T., Shang, X. & Zhou, J. (2011): "Content relevance and delivery time of SMS advertising", International Journal of Mobile Communications, Vol. 9 No. 1, pp. 19-38

Rettie, R., Grandcolas, U. & Deakins, B. (2005): "Text message advertising: response rates and branding effects", Journal of Targeting, Measurement and Analysis for Marketing, Vol. 13 No. 4, pp. 304-312

Rogers, E. (1995): Diffusion of Innovations, 4th ed., Free Press, New York, NY.

Rusbult, Caryl E. (1980), "Satisfaction and Commitment in Friendships," Representative Research in Social Psychology, Vol. 11, pp. 96-105.

Salo, J., Sinisalo, J. & Karjaluoto, H. (2008): "Intentionally developed business network for mobile marketing: a case study from Finland", Journal of Business & Industrial Marketing, Vol. 23 No. 7, pp. 497–506

Scharl, A., Dickinger, A. & Murphy, J. (2005); "Diffusion and success factors of mobile marketing", Electronic Commerce Research and Applications, Vol. 4 No. 2, pp. 159–173.

Sengupta, J. & Johar, G. V. (2002): "Effects of inconsistent attribute information on the predictive value of product attitudes: Toward a resolution of opposing perspectives", Journal of Consumer Research, Vol 29 No 2, pp. 39-56.

Shankar, V. & Balusbramanian, S. (2009): "Mobile marketing: A synthesis and prognosis", Journal of Interactive Marketing, Vol. 23 No. 2, pp. 118-129

Shankar, V., Venkatesh, A., Hofacker, C. & Naik, P. (2010): "Mobile marketing in the retailing environment: Current insights and future research avenues", Journal of Interactive Marketing, Vol. 24 No. 2, pp. 111-120

Sharma, C., Herzog, J. & Melfi, V. (2008): "A five - points measurement framework for mobile advertising", International Journal of Mobile Marketing, Vol. 3 No. 1, pp. 4-11

Stewart, D., Pechmann, C., Ratneshwar, S., Stroud, J. & Bryant, B. (1985): "Methodological and Theoretical Foundations of Advertising Copy Testing: A Review," Current Issues and Research in Advertising, Vol 2, pp. 1–78.

Sultan, F. & Rohm, A. J. (2008): "How to market to generation m(obile)", MIT Sloan Management Review, Vol. 49 No. 4, pp. 35–41.

Thibaut, J. W. & Kelley H. H. (1959): The Social Psychology of Groups, New York, John Wiley.

Thompson, M. (2006): "Human brands: Investigating antecedents to consumers' strong attachments to celebrities", Journal of Marketing, Vol 70 No 3, pp. 104-119

Tsang, M. M., Ho, S., & Liang, T. (2004); "Consumer attitudes toward mobile advertising: An empirical study", International Journal of Electronic Commerce, Vol. 8 No. 3, pp. 65–78.

Turel, O., Serenko, A. & Bontis, N. (2007): "User acceptance of wireless short messaging services: Deconstructing perceived value", Information & Management, Vol. 44, pp. 63–73

Ulaga, W. (2003), "Capturing value creation in business relationships: a customer perspective", Industrial Marketing Management, Vol. 32 No. 8, pp. 677-93.

Varnali, K. and Toker, A. (2010): "Mobile marketing research: The-state-of-the-art", International Journal of Information Management, Vol. 30, pp. 144–151

Wais, J. S., & Clemons, E. K. (2008): "Understanding and implementing mobile social advertising", International Journal of Mobile Marketing, Vol. 3 No. 1, pp. 12–18.

Walter, A., Ritter, T. & Gemu¨nden, H-G. (2001), "Value creation in buyer-seller relationships: Theoretical considerations and empirical results from a supplier's perspective", Industrial Marketing Management, Vol. 30 No. 4, pp. 365-77.

Wang, A. (2006): "Advertising engagement, a driver of message involvement on message effects", Journal of Advertising Research, Vol. 46, pp. 355–368.

Wang, A. & Acar, S., A. (2006): "Information search and mobile promotions", International Journal of Mobile Marketing, Vol. 1 No. 2, pp. 80-87.

Wang, A. (2007): "Branding over mobile and internet advertising, the cross-media effect", International Jour-

nal of Mobile Marketing, Vol. 2 No. 1, pp. 34–42.

Wen, H. J. & Mahatanankoon, P. (2004): "M-commerce operation modes and applications", International Journal of Electronic Business, Vol. 2 No. 3, pp. 301

Wickens, C. D. (1984): "Processing resources in attention." In Parasuraman, R. & Davies, D. R. (Eds.), Varieties of Attention (pp. 63-102), New York, Academic Press.

Xu, D. J. (2006/2007): "The influence of personalization in affecting consumer attitudes toward mobile advertising in China", The Journal of Computer Information Systems, Vol. 47 No. 2, pp. 9–20

Xu, H., Lou, X., R., Carroll, J. M. & Rosson, M. B (2011): "The personalization privacy paradox: An exploratory study of decision making process for location-aware marketing", Decision Support Systems, Vol. 51, pp. 42–52

Xu, H., Oh, L. B. & Teo, H. H. (2009): "Perceived effectiveness of text vs. multimedia location-based advertising messaging", International Journal of Mobile Communications, Vol. 7, No. 2, 154-177

Yang, K., & Jolly, L. D. (2006): "Value-added mobile data services: The antecedent effects of consumer value on using mobile data services", International Journal of Mobile Marketing, Vol. 1 No. 2, pp. 11–17.

Yeh, J.-T. & Lin, C.-L. (2010): "Measuring the effectiveness of advertisements sent via mobile phone: Implications of the appeal, endorser, and involvement model and purchasing behavior", Social Behavior and Personality, Vol. 38 No. 2, pp. 249-256.

Zeithaml, V.A. (1988): "Consumer perceptions of price, quality, and value: a means-end model
and synthesis of evidence", Journal of Marketing, Vol. 52 No. 1, pp. 2-22.

[1] http://mmaglobal.com/wiki/mobile-marketing (2011-12-21)

[2] http://www.youtube.com/watch?v=nJVoYsBym88 (2012-08-21)

APPENDIX 1

Table 1. Studies of consumer perceived value of mobile marketing

Research theme	Author	Theory	Type of study
Mobile service adoption	Constantinou et al (2009)	Reasoned based choice theory, perceived value & cultural differences in adoption intention	Quantitative
	Constantinou & Mahnke (2010)	Reasoned based choice theory, perceived value & gender differences in adoption intention	Quantitative
	Kim et al (2007)	Perceived value & extended TAM	Quantitative
	Turel et al (2007)	Perceived value & TRA	Quantitative
Mobile marketing adoption	Dai & Palvia (2009)	Personal predispositions, extended TAM, perceived value, compatibility & subjective norm	Quantitative
Mobile technology use	Park & SuJin (2006)	Consumer values, attitudes and behavioral intentions, technology trust, technology experience, (Elaboration-Likelihood Model (ELM) and Heuristic–Systematic Processing Model (HSM))	Quantitative
Mobile service use	Kim & Hwang (2006)	Personal predispositions and application value tendencies, user & media gratification theory, service quality	Quantitative
Mobile marketing use	Yang & Jolly (2006)	Consumer values, perceived value, TRA, TPB	Quantitative
	Kleinen et al (2009)	Personal predispositions, perceived value, intentions to use,	Quantitative
	Laukkanen (2007)	Benefits of internet and mobile bank	Qualitative
	Mahatanankoon et al (2005)	Values of mobile marketing and mobile marketing operation modes	Quantitative
	Xu et al (2011)	Perceived value & behavioral intentions, personal predispositions , technology experience	Quantitative
	Xu et al (2009)	Media formats, media uses and gratification (internet advertising), advertising effectiveness, technology experiences, personal predispositions, TRA	Quantitative
Mobile service loyalty	Deng et al (2010)	Perceived value, service quality, customer satisfaction, trust, loyalty & personal predispositions, technology experience	Quantitative
	Pilström & Brusch (2008)	Perceived value & customer loyalty	Quantitative
Mobile marketing loyalty	Lin & Wang (2006)	Perceived value, customer satisfaction, technology experience, trust & loyalty	Quantitative

Table 2. Studies of consumer perceived benefits and sacrifices of mobile marketing

Research theme	Author	Theory	Type of study
Mobile marketing adoption	Alda´s-Manzano et al (2009)	Personal predispositions & TAM, attitude affinity,compatibility	Quantitative
	Amin (2008)	Extended TAM	Quantitative
	Kim et al (2009)	Extended TAM, attitudes toward mobile communication, subjective norm	Quantitative
	Lu & Su (2008)	Extended TAM, mobile technology experience, compatibility	Quantitative
	Muk (2007)	Attributes of innovation for adoption, TRA	Quantitative
	Roach (2009)	Attributes of innovation for adoption	Quantitative
	Zhang & Mao (2008)	TAM, user & media gratification theory, trust, subjective norm	Quantitative
Mobile marketing use	Barutcu (2007)	Personal predispositions, technology experiences, mobile marketing tools classification, attitudes	Quantitative
	Bauer et al (2005)	Personal predispositions, perceived risk and utility (perceived value), TRA	Quantitative
	Carroll et al (2007)	Consumer acceptance of m-marketing	Qualitative & quantitative
	Cheng et al (2009)	Media uses and gratification (internet advertising), advertising effectiveness, attitudes	Quantitative
	Choi et al (2008)	Culture, media uses and gratification, advertising effectiveness, attitudes (internet advertising) and behavioral intentions	Quantitative
	Chowdhury et al (2006)	Media uses and gratification (internet advertising), advertising effectiveness, attitudes	Quantitative
	Dickinger & Kleijnen (2008)	TAM, TPB, previous category use	Quantitative
	Gao et al (2009)	Perceived interactivity, mobile design features. advertising effectiveness	Quantitative
	Haghirian & Inoue (2007)	Consumer values, mobile advertising values, media uses and gratification (internet advertising), advertising effectiveness, attitudes and behavioral intentions	Quantitative
	Jayawardhena et al (2009)	Trust, mobile marketing experience, perceived risk, behavior/permission	Quantitative
	Moynihan et al (2010)	TRA, TBP, perceived knowledge, self efficacy, trust	Quantitative
	Okazaki (2007:1)	Gender, technology experience, trust, advertising effectiveness, attitude and behavioral intentions	Quantitative
	Okazaki (2007:2)	Personal predispositions, media uses and gratification (internet advertising), advertising effectiveness, attitudes and behavioral intentions	Quantitative
	Okazaki et al (2007)	Trust, advertising effectiveness, attitude and behavioral intentions	Quantitative
	Okazaki & Hirose (2009)	Niche theory, media uses and gratification, enduring involvement, satisfaction, attitude, loyalty	Quantitative
	Okazaki & Romeo (2010)	Media displacement theory, media complementarity theory and media richness theory	Quantitative
	Peters et al (2007)	Media uses and gratification, TRA	Qualitative
	Rau et al (2011)	Information processing (content relevance, delivery time and frequency of messages), advertising effectiveness, attitudes, behavioral intentions	Quantitative
	Tsang et al (2004)	Media uses and gratification (internet advertising), TRA	Quantitative
	Wais & Clemons (2008)	Social marketing, viral marketing/word of mouth, attitudes	Quantitative
	Wang & Acar (2006)	Exploratory information search behavior, consumer attitudes towards internet and mobile promotions	Quantitative
	Xu (2006)	Media uses and gratification (internet advertising), advertising effectiveness, personalization, TAM, TPB	Quantitative
Mobile marketing loyalty	Chae et al (2002)	User & media gratification theory, information quality, customer satisfaction. loyalty	Quantitative
	Choi et al (2008)	Internet and mobile internet benefits and costs, customer satisfaction & loyalty	Quantitative
	Cyr et al (2006)	Extended TAM, design aestetics & customer loyalty	Quantitative

Table 3. Studies of the value of mobile marketing for retailers

Research theme	Author	Theory	Type of study
The value of mobile marketing for retailers	Komulainen et al (2007)	Perceived value, BTB and network value creation	Qualitative
	Lee et al (2007)	Insurance agents task characteristics, mobile technology characteristics, personal predispsitions	Quantitative
	Okazaki (2005)	Adoption of innovations in organizations	Quantitative
	Okazaki & Taylor (2008)	Adoption of innovations in organizations	Quantitative
The improved value of mobile marketing	Bellman et al (2011)	Advertising effectiveness, ELM, media uses and gratification, advertising planner grid, perceptions and information processing,	Quantitative
	Kim & Jun (2008)	Mobile marketing and advertising classification, advertising effectiveness	Qualitative & qualitative
	Kondo & Nakahara (2007)	Behavioral effect of advertising/direct marketing	Quantitative
	Li & Stoller (2007)	Advertising effectiveness (internet advertising)	Quantitative
	Merisavo et al (2006)	Advertising effectiveness, related products	Quantitative
	Nysveen et al (2005)	Investment and Interdependence Models of Relationships, Channel Addition Usage	Quantitative
	Rettie et al (2005)	Advertising effectiveness, traditional and direct marketing	Quantitative
	Wang (2007)	Integrated marketing, Multiple Resource Theory (MRT) on inter-media comparison, information processing	Quantitative
	Yeh & Lin (2010)	Advertising effectiveness, advertising appeal and endorser affects on advertising effects, information processing,	Quantitative
Realizing potential value in mobile marketing	Salo et al (2008)	Mobile marketing campaign process, mobile marketing value chain/network/actors, Intentionally Developed Business Networks (IDBN)	Qualitative
	Scharl et al (2005)	Mobile message & media success factors, TRA, TAM, advertising effectiveness	Qualitative & quantitative
	Sultan & Rohm (2005)	Media characteristics, advertising effectiveness, mobile value chain	Qualitative
	Sultan & Rohm (2008)	Media usage characteristics, attitudes towards mobile communications, personal predispositions	Quantitative

Table 4. Studied technology, services and applications

Research category	Technology, service, application	No. of studies
Consumer perceived value	Mobile devices	1
	Mobile services	7
	Mobile advertising	2
	Mobile distance channels	4
	Mobile marketing (several tools)	1
Consumer perceived benefits and sacrifices	Mobile services	1
	Mobile advertising	23
	Mobile distance channels	7
	Mobile marketing (several tools)	1
The value of mobile marketing for retailers	Mobile advertising	3
	Mobile marketing (internal)	1
The improved value of mobile marketing	Mobile advertising	8
	Mobile marketing (CRM)	1
Realizing potentials in mobile marketing	Mobile advertising	4
Total		**64**