

Aleksandra RADZISZEWSKA¹

CONSUMERS' ATTITUDES TOWARDS MOBILE MARKETING TOOLS

The growth and use of mobile commerce as an emerging technology has the potential to dramatically change the way consumers conduct transactions. This paper promotes a particular focus on mobile marketing. Mobile marketing refers to marketing of services or goods using mobile technology and marketing offers direct communication with consumers, anytime and anyplace. It holds potentially great economical opportunities. This study analyses the impacts of mobile phone technology developments on marketing. This paper reviews mobile marketing and then investigates the most successful form of mobile communication.

1. INTRODUCTION

Innovation creates marketing opportunities and challenges. With the rapid development of information technology, wireless telecommunications technology has made great advancements. Mobile phones increase the availability, frequency and speed of communication. One of the market's demands is to be able to communicate with potential customers and to contact them anywhere and anytime. Together with declining mobile device prices and the improvement of mobile device functionality, such technological advances provide a good foundation for the development of mobile commerce.² From a user's perspective, a mobile device is not only a tool for communication but also as a tool for commerce.³ Advances in mobile technologies and supporting network infrastructures create opportunities for mobile marketing. Mobile marketing refers to marketing of services or goods using mobile technology. It originates from research on mobile commerce and marketing.⁴ Mobile marketing offers direct communication with consumers, anytime and anyplace. It holds potentially great economical opportunities. Traditionally, mobile marketing has been viewed as mobility that provides consumers with personalized information based on their time, location and interests. Other definition describes mobile marketing as using interactive wireless media to provide customers with time and location sensitive, personalised information that promotes goods, services and ideas, thereby generating value for all stakeholders.⁵

¹ Dr Aleksandra Radziszewska, Katedra Zastosowań Lingwistycznych w Zarządzaniu, Wydział Zarządzania, Politechnika Częstochowska.

² S.J. Barnes, *The Mobile Commerce Value Chain: Analysis and Future Developments*, "International Journal of Information Management" 22.2 (2002), pp. 91–108.

³ M. Tsang, S. Ho, T. Liang, *Consumer Attitudes toward Mobile Advertising: An Empirical Study*, "International Journal of Electronic Commerce" 8.3 (2004), pp. 65–78.

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⁵ H. Bauer, S.J. Barnes, T. Reichardt, M. Neumann, *Driving Consumer Acceptance of Mobile Marketing: A Theoretical Framework and Empirical Study*, "Journal of Electronic Commerce Research" 6.3 (2005), pp. 181–192.

2. MOBILE COMMERCE

The rapid growth of mobile phone has led to the development of a new term- mobile commerce. Any transactions with a monetary value conducted via mobile communication networks can be considered mobile commerce.⁶ M-commerce has been defined as the use of mobile devices to communicate and conduct transactions through public and private networks.⁷ Mobile commerce is a new type of e-commerce transaction conducted through mobile devices using wireless telecommunication networks and other wired e-commerce technologies.⁸ It is any form of mobile communication between a business and its customers.⁹ Mobile commerce is a service-based business. In addition to e-commerce, mobile commerce creates new markets among producers, distributors, retailers and customers anywhere and at any time. For classifying electronic commerce, mobile commerce models are divided into B2B (business to business), B2C (business to customer) and C2C (consumer to consumer) perspectives. B2B mobile commerce refers to the transactions among suppliers, producers, wholesaler, distributors, retailers and logistics service providers conducted over mobile phone and wireless technology. C2C mobile commerce is an emerging area to buy and sell products and services over the mobile phone within mobile commerce. In this type of commerce, mobile phone users sell their products and services or second-hand products to other mobile phone users. B2C mobile commerce refers to the selling and buying of products and services via the mobile phone to mobile customers.¹⁰

Consumer trends and increased Internet usage shape the evolution of mobile marketing. Corporate Web sites often serve as the primary point of contact, asking consumers for permission to receive SMS and participate in campaigns. Text messaging is an additional communication channel for marketing campaigns.¹¹ The researchers present various conceptualisation of mobility. They suggest spatiality (location) and temporality (time) as two different but related dimensions of mobility.¹²

Mobility is highly defined by the way that a consumer is mobile and mobile marketing initiatives would benefit from a better understanding of the consumer mobility. The growth and use of mobile commerce as an emerging technology has changed the way consumers conduct transactions. The development of this new technology has led to changes in advertising, retailing, shopping and marketing. Companies should be ready for mobile marketing and mobile commerce. Mobile commerce has some core characteristics that differentiate it from classic e-commerce. These include:

- ubiquity – being available at any time and any location,`
- personalisation,

⁶ S.J. Barnes, *Mobile Commerce...*, pp. 91–108.

⁷ S. Balasubramanian, R. Peterson, S.J. Järvenpää, *Exploring the Implications of M-Commerce for Markets and Marketing*, "Journal of the Academy of Marketing Science" 30.4 (2002), pp. 348–361.

⁸ K. Siau, E. Lim, Z. Shen, *Mobile Commerce: Promises, Challenges, and Research Agenda*, "Journal of Database Management" 12.3 (2001), pp. 4–13.

⁹ M.N. Frolick, L.D. Chen, *Assessing Mobile Commerce Opportunities*, "Information Systems Management" 21.2 (2004), pp. 53–61.

¹⁰ S. Okazaki, *New Perspectives on M-Commerce Research*, "Journal of Electronic Commerce Research", 6.3 (2005), pp. 160–164.

¹¹ A. Scharl, A. Dickinger, J. Murphy, *Diffusion and Success Factors of Mobile Marketing*, "Electronic Commerce Research and Applications" 4.2 (2005), pp. 159–173.

¹² K. Siau, E. Lim, Z. Shen, *Mobile Commerce...*, pp. 4–13.

- flexibility – the mobile phone permits the user to conduct transactions and receive information even when they are engaged in another activity,
- dissemination – originators of information can may use the wireless network of mobile commerce to deliver specific information to customers,
- convenience – convenient for users to operate,
- instant connectivity – the company can easy connect to target customer,
- location – location-specific information and products can be provided.¹³

3. MOBILE MARKETING

Mobile advertising, mobile sales promotion, location based mobile service, mobile payments systems and mobile shopping stand out as the critical mobile marketing tools. A key component of mobile marketing communication is advertising. Mobile coupons in sales promotion play a vital role in mobile marketing. Mobile coupons boast at least three advantages: locating by mobile phone signals, time sensitivity and efficient handling by scanning the coupon's bar code at the point of sale.¹⁴ Location-based mobile services play a significant part in B2C mobile commerce. Location-based mobile services are the services in which the location of a person or an object is used to shape or focus the application or service. The ability to identify the customer's location at a point in time is one of the most promising applications of mobile commerce. By using the information on the users' identity, position, access time and profile, GSM operators or retailers can offer the users optimal information or services, which are contextually relevant to them at the point of need, and the customers' location data can be used for direct marketing purposes. Mobile payments systems allow mobile phone users to do their transactions via SMS messages or using electronic wallets. The mobile phone is a innovative tool to expand customers' shopping options, only secondary to the Internet. Mobile shopping is a new, easy, practical and price-conscious shopping tool.¹⁵

Mobile technologies support Customer Relationship Management. Customers can receive free newsletters, pictures, ring tones, bonus points or coupons after joining a loyalty program.¹⁶

A key component of mobile marketing communication is advertising, either in a push or pull mode. After obtaining the consumer's permission, push advertising sends relevant but not explicitly requested text messages. Pull advertising, by contrast, adds messages – often free information such as traffic reports or weather forecasts – to information the consumer requested.¹⁷ In push-based mobile marketing, advertisements get pushed to the mobile device of the consumer. Whether the user has accepted or not to receive these advertisements differs.¹⁸ Mobile advertising provides consumers with personalized infor-

¹³ I. Clarke, *Emerging Value Propositions for Mobile Commerce*, "Journal of Business Strategies" 18.2 (2001), pp. 133–148.

¹⁴ T.A. Shimp, A. Kavas, *The Theory of Reasoned Action Applied to Coupon Usage*, "Journal of Consumer Research" 11.3 (2004), pp. 795–809; S.J. Barnes, *Location-based Services*, "e-Service Journal" 2.3 (2003), pp. 59–70.

¹⁵ H. Bauer, S. Barnes, T. Reinhardt, M. Neumann, *Driving Consumer Acceptance...*, pp. 181–192.

¹⁶ A. Scharl, A. Dickinger, J. Murphy, *Diffusion...*, pp. 159–173.

¹⁷ G.A. Schreiber, *Schlüsseltechnologie Mobilkommunikation*, Deutscher Wirtschaftsdienst, Köln 2000, p. 43.

¹⁸ N.C. Romano, *Customer Relationship Management for the Web-Access Challenged: Inaccessibility of Fortune 250 Business Web Sites*, "International Journal of Electronic Commerce" 7.2 (2002), pp. 81–117.

mation based on their time of day, location and interests. Consequently mobile marketing has been defined as using a wireless medium to provide consumers with time- and location-sensitive, personalized information that promotes goods, services and ideas, thereby benefiting all stakeholders.¹⁹ Consumer attention and consumer behaviour are the conceptual model's measures of mobile marketing success. Attention largely depends on the content of the message. Messages tailored to the interests and preferences of the consumer, for example, can positively affect both attention and consumer attitudes.²⁰ We can distinguish three groups of success factors in mobile advertising. There are: content, personalization and customer's privacy.²¹ Similar to traditional media, a personalized advertising campaign relies upon databases with active and potential clients to reach the target group. Such databases contain personal information. There is a boundary between personalization and consumer control. Gathering data required for advertising messages concerns problems of consumers' privacy. Corporate policies must take into consideration conditions for sending mobile advertising messages.²²

4. LOCATION-BASED MARKETING

Advances in mobile technologies and supporting network infrastructures create opportunities for mobile marketing. Mobile marketing refers to marketing of services or goods using mobile technology. Examples of current mobile marketing often involve pushing information on promotion or discounting through SMSs to mobile phones of potential consumers in certain situations. Typically, the overall idea is that information can be better directed towards potential consumers by making the marketing location-sensitive or location-based. Location-based marketing can be highly relevant for local advertising; for example receiving information on train departures or arrivals at a train station.²³ Companies need to understand the physical context in which the consumer is located in order to provide relevant and timely promotion. As an example, pushing information on discounted tickets to travellers in a train station is only relevant and timely if the consumer is able to utilise the discounted offer. Mobility is highly defined by the way that a consumer is mobile and mobile marketing initiatives would benefit from a better understanding of the consumer mobility.²⁴ Hosbond and Skov present two cases of mobile marketing application: the Personal Shopping Assistant and the Context-Aware Shopping Trolley (CAST).²⁵

The first case outlines the Context-Aware Shopping Trolley (CAST). CAST supports shopping by promoting products in the supermarket and through guidance on how to locate these products. Products are visually displayed on the trolley-mounted screen with a photographic picture and the product's physical location in the supermarket. Products will be chosen for the display from a specified shopping list. CAST implements a pull-based strategy where shoppers can request more information on products or on additional prod-

¹⁹ A. Scharl, A. Dickinger, J. Murphy, *Diffusion...*, pp. 159–173.

²⁰ A. Facchetti, A. Rangone, F.M. Renga, A. Savoldelli, *Mobile Marketing: An Analysis of Key Success Factors and the European Value Chain*, "International Journal of Management and Decision Making" 6.1 (2005), pp. 65–80.

²¹ P. Barwise, C. Strong, *Permission-based Mobile Advertising*, "Journal of Interactive Marketing" 16.1 (2002), pp. 14–24.

²² M. Tsang, S. Ho, T. Liang, *Consumer Attitudes...*, pp. 65–78.

²³ S. Okazaki, *New Perspectives...*, pp. 160–164.

²⁴ S.J. Barnes, E. Scornavacca, *Mobile Marketing: The Role of Permission and Acceptance*, "International Journal of Mobile Communications" 2.2 (2004), pp. 128–139.

²⁵ J.H. Hosbond, M.B. Skov, *Micro Mobility Marketing...*, pp. 68–77.

ucts than specified in the shopping list. In addition to supporting consumer location awareness, CAST promotes products in close proximity. Getting close to a specific product, the system sends an audio alert through the user's headset and displays a list of nearby products. By tapping an item in the screen, its position is illustrated on the map. In this state, only products that are considered nearby are shown on the map; all other icons are temporarily removed to reduce complexity. CAST targets the supermarket products to the consumer in multiple ways: location of products, visual appearance of products, existence of relations between products and information about products. The basic functionality combines two dimensions by providing a photograph of nearby products. CAST supports the consumer's knowledge of the existence of and relations between objects by showing products similar and related to those on the shopping list. The consumer can select an item from the shopping list to view a list of alternative products. The user can select an alternative product, displaying its picture, and view more detailed information related to the product. The second case outlines the Personal Shopping Assistant. It is a mobile prototype and supports the shopping experience in supermarkets by continuously monitoring consumer behaviour to enable the pushing of product ads. More specifically, the primary service delivered by the system is to deliver relevant product information to customers based on personal preferences when and where the need arises. Specifically, relevant advertisements are dynamically and visually displayed for each customer as she moves around in the store. The system is designed to create improved shopping experiences for consumers, continuously during shopping, provides shoppers with tailored promotions and marketing of supermarket products. The primary focus is on the consumer, it is expected that advertisements presented at the right time, the right place and to the right consumer will create increased sales.

5. OWN RESEARCH

The conducted research investigates the most successful form of mobile communication with consumers. Two hundred respondents have been examined for analysing the aspects connected with using mobile marketing tools in contacts with consumers. Data for this research were collected through a questionnaire survey. Attitudes towards mobile marketing tools were measured by means of 6 questions that the respondents marked using a four-point scale. The elaborated scale defines the acceptance level for different mobile marketing tools (high, average, low, lack of acceptance). The research was conducted in the period between September and November 2009. The results of questionnaire survey have been presented in table 1.

Table 1. Consumers' attitudes towards mobile marketing tools.

Mobile marketing tools	Acceptance level				Average of positive indications
	high	average	low	lack of acceptance	
Mobile pull advertising	96	73	22	9	63,66
Mobile push advertising	64	69	61	6	64,66
Mobile sales promotion	147	49	4	-	66,66
Location-based marketing	82	83	27	8	64,00
Mobile shopping	24	68	94	14	62
Mobile payment systems	37	79	73	11	63

Source: own research.

The most successful mobile marketing tool is mobile sales promotion. The high acceptance levels have mobile advertising and location-based marketing. The lowest acceptance levels have mobile shopping and mobile payment systems. It is probably connected with low consumer's confidence towards transaction safety.

Additionally the respondents have indicated the factors that influence their attitudes towards mobile marketing. The aim of analysis was checking how mobile technology contributes to improvement of relationship with customers. The following factors have been taken into consideration: privacy ensuring, transaction safety, personalization, convenience, flexibility, time and location-specific marketing. Influence of these factors on customer's satisfaction level has been checked by means of χ^2 - test. In case of all considered factors the value of χ^2 statistic was higher than the critical value. The significance of influence has been confirmed at the significance level $\alpha = 0,05$. The results of conducted analysis have been shown in table 2.

Table 2. Factors of customer's satisfaction in mobile marketing.

Conditions of customers' satisfaction	Value of χ^2 statistic	Critical value
transaction safety	192,04	7,89
personalization	134,89	7,89
convenience	109,76	7,89
time-specific marketing	59,21	7,89
location-specific marketing	85,61	7,89
privacy ensuring	127,61	7,89
flexibility	92,41	7,89

Source: own elaboration.

The conducted analysis showed that the considered factors connected with mobile technology visibly contribute to improvement of customer's satisfaction level in mobile commerce. Flexibility, convenience, personalised, time-independent and location – specific marketing information influence the consumers' acceptance for mobile marketing tools. Transaction safety and privacy ensuring determinate the acceptance for mobile payment systems.

5. CONCLUSIONS

In parallel with the Internet, mobile communications and technologies have emerged to play a key role in business and marketing. The development of mobile payment systems (credit cards, paying via SMS messages or using electronic wallets) supports the development of mobile commerce. All mobile phone users are target customers for mobile advertising and mobile promotion. The successful adoption of mobile advertising plays a crucial role in improving attitudes towards mobile commerce. Text messages should contain an attractive idea. Text messages should be personalized based on the consumer's local time, location, and preferences. Company must consider the best time and message frequency for the target group and topic. Consumers increasingly expect tailored and location-based services, thereby underlining the importance of personalized mobile marketing. Personalizing messages increases impact of customer preferences. Mobile advertising, mobile sales promotions and location-based services are more positively accepted by mobile phone users. There are factors that may play a crucial role in improving attitudes towards mobile commerce. Growth in mobile commerce depends on reducing the

potential risks for mobile payment transaction and targeting the mobile phone users who have more positive attitudes towards mobile marketing tools.

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NARZĘDZIA MARKETINGU MOBILNEGO W OCENIE KONSUMENTÓW

W artykule przybliżona została problematyka wykorzystania technologii mobilnych w działalności marketingowej przedsiębiorstw. W pracy scharakteryzowane zostały narzędzia marketingu mobilnego oraz możliwości ich zastosowania w relacjach mobilnymi konsumentami, którzy niezależnie od miejsca i czasu mogą dokonywać zakupów, płatności i aktywnie korzystać z informacji na temat produktów lub usług. W celu wskazania najbardziej skutecznych narzędzi komunikacji z klientem w marketingu mobilnym przeprowadzone zostało badanie ankietowe. Jego wyniki pozwoliły wskazać determinanty satysfakcji oraz najbardziej preferowane przez konsumentów formy mobilnego marketingu.