# MOBILE MARKETING FUTURE TRENDS

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***Abstract***

*The present article proposes an introspection into the field of a new marketing specialization – mobile marketing. The concept mainly refers to all marketing activities related to the new communication channel – Short Message Service, Multimedia Messaging Service, and internet access from mobile phone. The article provides, at the same time, a marketing perspective about future trends of mobile marketing and mobile media, and also a technical perspective related to the future mobile communication technologies in the field – the LTE (Long Term Evolution) – cellular communication system optimized to support packet-switched data services to enable mobile broadband.*

*The conclusions of the article focus on the relevance of mobile marketing, techniques efficiency related to brand promotion, changing consumers attitude and the development of such techniques imposed by the new mobile communication system*

**Key-words:** *mobile marketing, long term evolution, broadband, brand awareness, consumer attitude*

**JEL Classification:** $M_{31}$, $O_{31}$

## Introduction

The global penetration of mobile phones increased significantly from 79.1% to 87.2%, between 2004 and 2007 (MobileYouth 2005)[1] .

The same source stated for 2010, the percentage of penetration level in using mobile phones among young population (14 to 29 years of age) is between 49% in Uganda, up to 246% in Qatar (from this respect Romania places 13$^{th}$ with a rate of 140% penetration among young users).

With such a high percentages of the world's population owning a mobile phone, marketers from all over the world have the ability to communicate offers directly to the target audience whenever and wherever they may be, offering much more personalised services.

[1] www.mobileyouthreport.com.

The high rates of young people using one or multiple mobile networks accounts offer a large potential for all kinds of marketing related applications, software, etc., and most importantly, the opportunity for marketers to develop and control new types of attitude and consumption habits.

Opportunities in wireless marketing and advertising have therefore risen a great deal, due to higher penetration, and also to the interactions between consumer and advertiser, which have been rapid and easy.

**Literature review**

The academic literature regarding mobile marketing has been tremendously enlagged its volume in the last decade, as various researchers contributed to define and shape the concepts in the area of mobile channels from the marketing perspective.

That is why we present a few general research guidelines in the field, pointing out only the main issues regarding the potential of mobile marketing, mobile media, the consumer interactions with these new channels and integration of mobile marketing techniques in the marketing activity as a whole.

Mobile marketing can be defined as "using a wireless medium to provide consumers with time – and location sensitive, personalized information that promotes products, services and ideas, thereby benefiting all stakeholders." (Scharl, A., Dickinger A., Murphy, J., 2005)

If we take into consideration the classical definition of AMA: "Marketing management is the process of planning and executing the conception, pricing, promotion and distribution of goods, services, and ideas to create exchanges that satisfy individual and organizational goals", we can assume that it implies sequential marketing stages, as well as temporal and spatial separation between buyers and sellers. Mobile devices blur these boundaries and distinctions by extending traditional marketing's time-space paradigm. As with other forms of digital marketing, mobile media incorporate interactivity and transcend traditional communication, allowing for one-to one, many-to-many and mass communication models.

Mobile Marketing enhances consumer-brand relationship, the interaction between consumers and their mobile phones, together with the ability allowed by mobile advertising to control the viewing environment, providing advertisers with an opportunity to build more meaningful brand relationships than at any time in the advertising history (Aaker J.L., Benet-Martinez V. and Garolera J., 2001).

Mobile phones are thus regarded not only as delivery platforms, but also as a way to connect the platform with mass media and points of sale, and can therefore be successfully implemented to help lead the consumer to a purchase. Mobile phones are also ideal mechanisms for marketing, thanks to their seamless integration as a direct email channel to the target audience (Fujita A., 2008).

Today, individuals maintain a hyper-personal and interactive relationship with their cellular phone (Babinet G., Despres J.C., Gastaldi F., 2003). That is why,

if a certain company wishes to address particularly to a specific target audience, messages through mobile phones are the ideal instrument.

Mobile phones are usually carried everywhere and kept within reach of their owners. They are ideal for use in conjunction with a variety of traditional media tools such as indoor and outdoor advertising and broadcast channels (Fujita A., 2008).

The emergence of the 'opt-in' SMS services allowed the subscribers to be quickly informed about the availability of a promotion or of an innovative service. It is an effective medium to generate traffic by motivating a determined target to contact a call center or to visit a sale location.

Mobile phones have the potential to be ideal personalized tools for providing an opportunity to the marketers to send an offer to the right consumer at the right time (Barutçu, S., 2007).

**Content**

The main issue related with the application of mobile marketing remains the consumers' attitude towards mobile advertising, the way that any potential target responds to different types of messages delivered via this channel.

After a considerable period of tryouts and in-field experiments, marketers have found that the new type of mobile advertising had also some major restrains, despite its concrete qualities.

In general, consumers have a negative attitude toward mobile advertising, unless they have specifically consented to it, (Tsang, 2004), there is a direct relationship between consumer attitude and consumer behavior. Thus, it is not a good idea to send SMS advertisements to potential customers without their prior permission.

Mobile advertising and Internet advertising have many features in common-both are emerging media used to deliver digital texts, images, and voices with interactive, immediate, personalized, and responsive capabilities (Yoon, S.J., and Kim, J.H, 2001).

Due to the technical specifications and based on different strategic applications, wireless (mobile) marketing can be either permission-based, incentive-based, or location-based (Zoller, E.; Housen, V.L.; and Matthews, J.2001).

*Permission-based advertising* differs from the traditional bothering advertising in the sense that messages about specific products, services or content are sent only to the individuals who have explicitly indicated their willingness to receive the message. Consumers often ignore the message when interrupted by an advertisement. By relying on the target audience granted permission, the permission-based advertising focuses on reducing the discomfort.

*Incentive-based advertising* provides specific financial rewards to individuals who agree to receive promotions and campaigns. For example, mobile phone companies may reward customers with free connection time for listening to voice advertisements. Both permission-based and incentive-based advertising mechanisms are feasible for mobile advertising because the wireless technology makes it possible the identification of the individual users.

In addition to the individual identification, mobile technology also allows to locate a particular consumer.

*Location-based advertising* takes advantage of the feature to target people at a certain location. Advertisements are sent based on where the user is at that moment or where the user is going next (Zoller, E.; Housen, V.L.; and Matthews, J.2001).

The evolution of the mobile marketing content may be generally summarized as:

A. **Using the Shorts Message Service (SMS)**

The **Shorts Message Service (SMS)** is an immediate, automated, reliable, personal, discrete and customized channel (Karjaluoto H., Leppaniemi and Salo., 2008).

Table 1

**SMS Advertising audience and response rates**

SMS Advertising Audience and Response Rates
Three-month average ending August 2007 and August 2008
Mobile Subscribers in EU5 (U.K., France, Germany, Italy and Spain)
Source: comScore M: Metrics

| | **Received SMS Advert (000's)** | | | **% Responded to SMS Advert** | | |
|---|---|---|---|---|---|---|
| | Aug-07 | Aug-08 | % Change | Aug-07 | Aug-08 | Point Change |
| Downloads for mobile phone | 40,792 | 35,915 | -12.0% | 4.4% | 3.9% | -0.6 |
| News or information | 25,929 | 22,122 | -14.7% | 2.8% | 3.2% | 0.4 |
| Mobile phone or plan | 32,222 | 31,574 | -2.0% | 4.6% | 4.7% | 0.1 |
| Entertainment | 12,644 | 11,230 | -11.2% | 4.3% | 5.1% | 0.7 |
| **Total Mobile + Media Sectors** | **111,587** | **100,841** | **-9.6%** | 4.1% | 4.1% | 0 |
| | | | | | | |
| Clothing/Fashion | 3,982 | 5,503 | 38.2% | 5.8% | 6.4% | 0.6 |
| Restaurants | 1,037 | 1,424 | 37.3% | 11.6% | 15.5% | 3.9 |
| Cars | 4,407 | 3,731 | -15.4% | 11.2% | 7.9% | -3.3 |
| Food | 1,413 | 2,162 | 53.0% | 9.2% | 12.6% | 3.4 |
| Financial services | 8,963 | 9,956 | 11.1% | 3.7% | 4.7% | 1.0 |
| Consumer electronics | 3,957 | 4,647 | 17.4% | 6.3% | 6.7% | 0.4 |
| Travel | 5,779 | 6,602 | 14.2% | 4.9% | 5.8% | 0.9 |
| **Total Non-Mobile or Media Sectors** | **29,539** | **34,024** | **15.2%** | **6.2%** | **6.8%** | **0.5** |

*Source*: www.comscore.com.

Mobile telephone companies plan to use the SMS for customer relationship management, sending their clients information on where to get cheap pre-paid phone cards when their credits are running low.

Companies can send coupons to cell phones via SMS. In other words, the mobile couponing offers at least three advantages: targeting based on customer cell phone numbers; time sensitivity, e.g. receiving a 20% discount on purchases immediately after entering a shop; and efficient handling by scanning the coupon's bar-code at the cash desk. It has been shown that the rates of percent coupon from a total of a company can get close to 11% in some cases (www.borders.com coupon campaign).

As for the efficiency of SMS advertising, compared to click-through rates of less than 1% for online advertising [Hanson, W. 2000), wireless click-through rates and call-through rates are 19% and 12%, respectively.

Table 2

**Status of the main activities in how the subscribers use mobile phones**

comScore Mobile Benchmark Study
Three-month average ending August 2008 vs. Same Period in 2007
Mobile Subscribers in EU5 (U.K., France, Germany, Italy and Spain)
Source: comScore M: Metrics

| | Germany | | Spain | | France | | Italy | | UK | |
|---|---|---|---|---|---|---|---|---|---|---|
| Activity | % Users | Change | % Users | Change | % Users | Change | % Users | Change | % Users | Change |
| Watched video | 3.7% | 3.6% | 7.9% | 1.5% | 5.5% | 6.9% | 7.4% | 6.9% | 5.2% | 4.4% |
| Listened to music | 19.3% | 0.4% | 24.1% | 1.4% | 16.2% | 2.2% | 16.8% | 2.0% | 22.2% | 1.5% |
| Accessed news/info via browser | 6.6% | 0.6% | 9.3% | 7.7% | 10.8% | 9.4% | 9.3% | 12.1% | 16.7% | 2.4% |
| Received SMS ads | 29.2% | -2.3% | 73.6% | -0.7% | 62.8% | 0.2% | 54.3% | -2.1% | 38.2% | -1.4% |
| Played downloaded game | 7.9% | 1.4% | 11.3% | -4.7% | 4.2% | 4.5% | 8.5% | 3.0% | 10.5% | 1.5% |
| Accessed downloaded application | 2.9% | -0.9% | 3.4% | 2.8% | 2.1% | 22.1% | 5.1% | 1.4% | 4.0% | 6.4% |
| Sent/received photos or videos | 22.1% | 1.0% | 33.2% | 2.0% | 25.4% | 7.7% | 32.8% | 4.0% | 31.8% | 1.2% |
| Purchased ringtones | 2.9% | -6.6% | 4.1% | -1.9% | 3.2% | 3.7% | 3.3% | -7.5% | 3.1% | -1.1% |
| Used email | 7.3% | -1.4% | 10.5% | 2.8% | 7.1% | 8.1% | 11.9% | 3.5% | 9.6% | 1.9% |
| Accessed social networking sites | 1.9% | -1.8% | 3.5% | 20.8% | 2.5% | 10.4% | 3.0% | 17.6% | 7.3% | 10.0% |

*Source*: www.comscore.com.

The table above presented the SMS Advertising audience and response rates from a research conducted in 2007 and 2008 on mobile subscribers from UK, France, Germany, Italy and Spain, by a well-known research company, comScore.

It has been shown that the biggest rate of response was in case of food adverting content, restaurants and cars, reaching even a 15.5% rate. This result is very demanding for a direct marketing type instrument as the mobile advertising.

If we look at the main activities in which the mobile subscribers have been involved (table nr 2) via their mobile phones, we can point out that almost 73.6% (from a total of subscribers in Spain) received SMS ads which proves a big rate of SMS advertising penetration among the mobile phone users.

### B. **Developing Brand Image Campaigns**

Even if we took into consideration the limitations of SMS – the text is limited to a 160 number of characters, specialists began to develop brand image campaign using a SMS campaign, correlated with online and offline classical promotional efforts.

The key to implement a real scale brand image campaign resides in using the much evolved technology of MMS (Multimedia Messaging Service) that allows targeted personalised messages with multimedia (audio, video, text) content, and the possibility to have full online access to web pages content related with the message itself.

It has been stated that trusted brands are more and more important in the virtual world where they influence online purchases, generate customer loyalty (Clifton, R.2002), and attract customers to their Web sites. This ‘virtual branding’ effect may apply to SMS and MMS as well.

Broadband access and advanced mobile devices will enable multimedia content access for a very large mass of auditorium and thus increase image campaign possibilities.

Real time transmission, whereby the message appears on the potential consumer’s screen within seconds, will further increase the mobile marketing success. These rapid broadcasts offer opportunities, such as ordering songs played on the radio immediately after listening to them.

### C. **Integrated mobile marketing mix**

The future trend for mobile marketing is related to the capacity of different companies to integrate different elements of the mobile marketing mix into a strong objective-driven strategy. From this point of view, the best thing to do is to start the mobile marketing effort with a SMS campaign, followed up by a mobile Web site, mobile advertising and mobile couponing.

After implementing the above steps, it is imperious to have a sustainable campaign of incentives for the consumers that has been active for all this interval of time.

D. **High consumer responsiveness**

Maybe the most intriguing and demanding challenge for modern marketers as a result is the one related with the objective of achieving high consumer responsiveness of the mobile marketing activities.

Research conducted so far (Heinonen K; Strandvik T, 2007) stated that message content relevance and channel acceptance are not directly related to high consumer responsiveness. Content relevance in itself does not necessarily mean high responsiveness as the channel may have been altogether perceived as disturbing. In contrast, low relevance may also involve some positive responsiveness, if the channel for the marketing activity is accepted.

Consumers expect messages to be personal and of high interest, so disappointment is greater when they get undesired messages.

A firm's customers may fall into different responsiveness groups.

By looking at the consumer responsiveness in terms of disturbance and relevance, it is possible to see four different situations for increasing the prospects of getting the consumers' attention, as we can see in the figure below.

It is the most important thing to choose the right design for messages, right timing, to take into consideration different type of consumers responsiveness. The mobile marketing strategy itself should be conducted in light of these results.

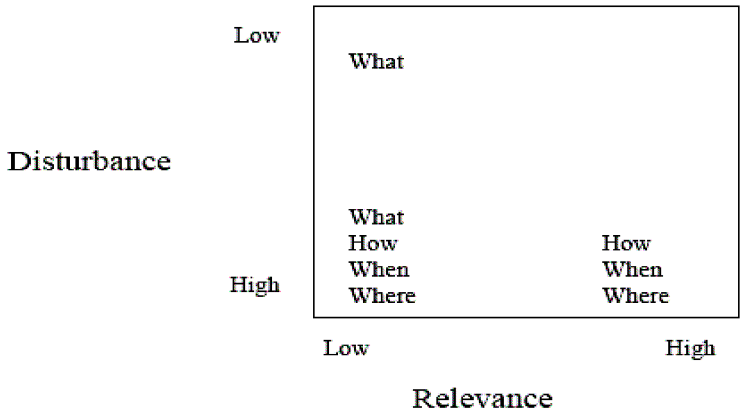


Figure 1. Communication strategies based on customer responsiveness

*Source*: Kristina Heinonen and Tore Strandvik – *Consumer responsiveness to mobile marketing, International Journal of Mobile Communications*, Volume 5, Number 6 / 2007, pg 615

E. **Emergence of new technologies**

A GSM and its evolution through GPRS, EDGE, WCDMA and HSPA (*High Speed Packet Access*), is the technology stream of choice for the vast majority of the world's mobile operators. Today's commercial offerings, which are based on this technology evolution, typically offer downlink speeds at the order of 7 Mbps (Mega bits per second), with the expectation that 14 Mbps will become widely available in the near future. At such improvement in the 3rd Generation (3G) capabilities, there are obvious questions to be asked about what should happen next.

Users have experienced a dramatic price decrease in telecommunication charges and they now expect to pay less but receive more. Therefore, in deciding the next generation in mobile communication, there must be a dual approach: seeking considerable performance improvement, but at a reduced cost. LTE (Long Term Evolution) is the next step and will be the basis on which future mobile communications systems will be built. LTE is the first cellular communication system optimized to support packet-switched data services to enable mobile broadband.

Mobile broadband is becoming a reality, as the Internet generation grows used to having broadband access wherever they go, not just at home or at the office. Out of the estimated 1.8 billion people who will have broadband by 2012, some two-thirds will be mobile broadband consumers – and the majority of these will be served by HSPA and LTE networks.

People can already browse the Internet or send e-mails using HSPA-enabled notebooks, replace their fixed DSL modems with HSPA modems or USB dongles, and send and receive video or music using 3G phones. With LTE, the user experience will be even better. It will further enhance more demanding applications like interactive TV, mobile video blogging, advanced games or professional services. LTE offers several important benefits for consumers and operators:

o ***Performance and capacity*** – One of the requirements on LTE is to provide downlink peak rates of at least 100 Mbit/s. The technology allows for speeds over 200 Mbit/s. Furthermore, RAN (Radio Access Network) round-trip times shall be less than 10 ms. In effect, this means that LTE – more than any other technology – already meets the key 4G requirements.

o ***Simplicity*** – Firstly, LTE supports flexible carrier bandwidths, from below 5 MHz up to 20 MHz. LTE also supports both FDD (*Frequency Division Duplex*) and TDD (*Time Division Duplex*). Ten paired and four unpaired spectrum bands have so far been identified by 3 GPP for LTE. And there are more band to come. This means that an operator may introduce LTE in 'new' bands, where it is much easier to deploy 10 MHz or 20 MHz carriers, and eventually deploy LTE in all bands. Secondly, LTE radio network products will have a number of features that simplify the building and management of next-generation networks. For example, features like plug-and-play, self configuration and self-optimization will simplify and reduce the cost of network rollout and management. Third, LTE will be

deployed in parallel with simplified, IPbasedcore and transport networks that are easier to build, maintain and introduce services in.

o ***Wide range of terminals*** – in addition to mobile phones, many computer and consumer electronic devices, such as notebooks, ultra-portables, gaming devices and cameras, will incorporate LTE embedded modules. Since LTE supports handover and roaming to existing mobile networks, all these devices can have global mobile broadband coverage from day one.

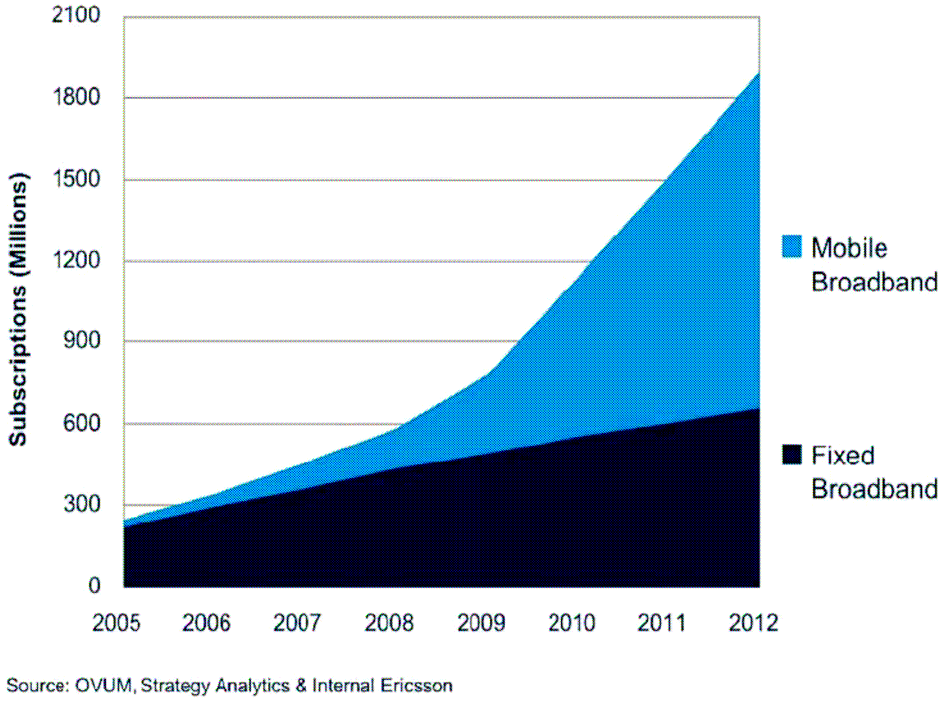


Figure 2. Broadband growth 2005-2012

*Source*: Dipl.-Ing. Gerhard Fritze M.Sc. Customer Solution Manager Ericsson Austria GmbH, – SAE – *The Core Network for LTE*, Erricson Press Report, 2008

Supporting evidence is shown for mobile broadband take-off. Firstly, consumers understand and appreciate the benefits of mobile broadband. Most people already use mobile phones, and many also connect their notebooks over wireless LANs. The step towards full mobile broadband is intuitive and simple, especially with LTE that offers global coverage and roaming with existing 2G and 3G networks.

Secondly, experience from HSPA shows that, when operators provide good coverage, service offerings and terminals, mobile broadband rapidly takes off. Packet data traffic started to exceed voice traffic during May 2007 as an average world in WCDMA networks (see Figure 2). This is mainly due to the introduction

of HSPA in to the networks. Recently HSPA data cards and USB dongles have become very popular. Several operators have seen a fourfold increase in data traffic in just 3 months after they launched HSPA.

In many cases, mobile broadband can compete with fixed broadband on price, performance, security and, of course, convenience. Users can spend time using the service rather than setting up the WLAN connection, worrying about security or losing coverage.

Thirdly, a number of broadband applications are significantly enhanced with mobility. Community sites, search engines, presence applications and content-sharing sites like YouTube are just a few examples. With mobility, these applications become significantly more valuable to people. User-generated content is particularly interesting, because it changes traffic patterns to make the uplink much more important. The high peak rates and short latency of LTE enable real-time applications like gaming and IPTV.

In summary, operators can introduce LTE flexibly to match their existing network, spectrum and business objectives for mobile broadband and multimedia services.

**Conclusions**

The main issues regarding trends and evolution for mobile marketing are as follows:

– the efficiency of mobile marketing technique in use and the effect on the consumer attitude and habits;

– the implementation of a mobile marketing strategy, correlated with the whole marketing mix – offline and online, because it has been shown that different marketing goals cannot be achieved without an integrated approach;

– a strong investment in marketing research regarding creative ways of using the new arriving mobile technologies (LTE, HSPA, etc.);

– adapting the mobile marketing content to the company's different responsiveness groups of customers. Theories of innovation diffusion and acceptance have been completed with researches that show another type of variables influencing the consumer responsiveness and feedback. The main concern has to be targeting the right consumer's with the right message content; otherwise, in time, the consumer's response is much more dramatic compared to the other marketing channels.

The evolution of marketing theory and practice in time has pointed out that marketing is a science that finds a great ally in technology and one of the most important sources for developing new concepts and applications. As regards the mobile marketing, this is even more convincing, since this type of marketing is a technology-driven field, at its essence.

## REFERENCES


- Aaltonen Aleksi (2010): *Making Up Mobile Advertising Audience*, proceedings 3rd Latin American and European Meeting on Organization Studies (LAEMOS), 7–10 April 2010, Buenos Aires.
- Aaker J.L., Benet-Martinez V. et Garolera J. (2001), *Consumption Symbols as Carriers of Culture: A Study of Japanese and Spanish Brand Personality Constructs*, Journal of personality and social psychology, vol. 81, no. 3, p. 492-508.
- Barwise, P., Elberse A., and K. Hammond (2002), *Marketing and the Internet*, in Working Paper, Future Media Research Programme, London Business School, London <online:http://www.london.edu/marketing/Future/future_media_research_projects/Untitled/internet/ATI_1.3.pdf >.
- Barutçu, S., (2007), *Information Technology, Mobile Marketing and Mobile Commerce in Consumer Markets*, 3rd International Conference on Business, Management and Economics, June 13-17, Yaşar University, İzmir, Turkey.
- Bouhlel O., Mzoughi N., Hadiji D., Slimane I. Ben, (may 2009), *Brand Personality and Mobile Marketing: An Empirical Investigation*, World Academy of Science, Engineering and Technology, Proceedings, Tokyo, Japan, issue 53, pp. 703-710, http://www.waset.org/journals/waset/v53/v53-113.pdf.
- Carroll, J., Howard, S., Peck, J., Murphy, J. (2002), *A Field Study of Perceptions and Use of Mobile Telephones by 16 to 22 Year Olds*, The Journal of Information Technology Theory and Application, Vol. 4, No. 2, pp. 49-61.
- Clifton, R. (2002), *Brands and Our Times*, Journal of Brand Management, vol. 9, no. 3, pp. 157-161
- Dickinger Astrid, Haghirian Parissa, Murphy Jamie, Scharl Arno, (2004), *An Investigation and Conceptual Model of SMS Marketing*, Proceedings of the 37th Hawaii International Conference on System Sciences.
- Fritze Gerhard Dipl.-Ing. M.Sc. (2008), *Customer Solution Manager Ericsson Austria GmbH*, SAE – The Core Network for LTE, Errricson Press Report
- Fujita Akihisa, (2008), *Mobile Marketing in Japan: The acceleration of Integrated Marketing Communications*, Journal of Integrated Marketing Communications, North Western University, pp. 41-46.
- Gyozo Gidofalvi, Hans Ravnkjaer Larsen, Torben Bach Pederse (2008), *Estimating the capacity of the Location-Based Advertising Channel*, International Journal of Mobile Communications, vol. 6, no. 3, pp. 357-375.
- Hans H. Bauer, Stuart J. Barnes, Tina Reichardt, Marcus M. Neumann, (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.
- Hanson, Ward (2000), *Principles of Internet Marketing*, South-Western College Publishing, Cincinnati.
- Hee-Woong Kim, Hock Chuan Chan, Sumeet Gupta, (2007), *Value-based Adoption of Mobile Internet: An Empirical Investigation*, Decision Support Systems 43, p. 111-126.
- Heinonen Kristina, Strandvik Tore (2007), *Consumer Responsiveness to Mobile Marketing*, International Journal of Mobile Communications, vol. 5, no. 6, pp. 603-617.
- Kai Wehmeyer (2007), *Mobile Ad Intrusiveness – The Effects of Message Type and Situation*, 20th Bled eConference eMergence: Merging and Emerging Technologies, Processes, and Institutions June 4-6, 2007, Bled, Slovenia.

- Matti Leppäniemi and Heikki Karjaluoto, (2005), *Factors Influencing Consumers' Willingness to Accept Mobile Advertising: A Conceptual Model*, International Journal Mobile Communications, vol. 3, no. 3, pp. 197-213.
- Melody M. Tsang, Shu-Chun Ho, and Ting-Peng Liang (2004), *Consumer Attitudes Toward Mobile Advertising: An Empirical Study*, International Journal of Electronic Commerce, vol. 8, no. 3, pp. 65-78.
- Pagani Margherita (2004), *Determinants of Adoption of Third Generation Mobile Multimedia Services*, Journal of interactive marketing, vol. 18, no. 3, pp. 46-59.
- Payne Adrian, Frow Pennie (2005), *A Strategic Framework for Customer Relationship Management*, Journal of Marketing, vol. 69, no. 4, pp. 167-176.
- Pousttchi, Key; Wiedemann, Dietmar Georg, 2005, *A Contribution to Theory Building for Mobile Marketing: Categorizing Mobile Marketing Campaigns through Case Study Research*, Journal of Electronic Commerce Research, Vol. 6, no. 3, pp. 160-164.
- Scharl, Arno., Dickinger Astrid., Murphy Jamie, (2005), *Diffusion and Success Factors of Mobile Marketing*, Electronic Commerce Research and Applications, vol. 4, no. 2, pp. 159-173.
- *** (2000). *First-to-Wireless: Capabilities and Benefits of Wireless Marketing and Advertising Based on the First National Mobile Marketing Trial*, WindWire Inc., Morrisville NC.
  http://www.imapproject.org/imapproject/downloadroot/public3/ftw_report.pdf.
- Yoon, S.J., and Kim, J.H. (2001), *Is the Internet More Effective than Traditional Media? Factors Affecting the Choice of Media*. Journal of Advertising Research, vol. 41, no. 6, pp. 53-60.
- Teo T.S.H., Pok Siau Heong (2003), *Adoption of WAP-Enabled Mobile Phones among Internet Users*, The International Journal of Management Science, Omega, vol. 31, pp. 483-498, http://www.bschool.nus.edu.sg/staff/bizteosh/TeoPokOmega2003WAP.pdf.
- Scornavacca Eusebio, Barnes Stuart J, Huff Sid L., (2005), *Mobile Business Research, 2000-2004: Emergence, Current Status, and Future Opportunities*, 13th European Conference on Information Systems, Information Systems in a Rapidly Changing Economy, *ECIS 2005 Proceedings*, Regensburg, Germany, May 26-28, 2005, Paper 59.
- Tähtinen Jaana, Salo Jari (2004), *Special Features of Mobile Advertising and their Utilization*, Proceedings of the 33rd EMAC Conference, 18-22.5.2004 (CD), Murcia, Spain.
- Zoller, Eden; Housen, V.L.; Matthews, J. (2001), *Wireless Internet Business Models: Global Perspective, Regional Focus*. OVUM 2001 Report, Ovum Ltd, London, ISBN-10: 1902566858, pp. 1-64.
- www.mobileyouthreport.com.
- www.comscore.com.