

Preface

There is little doubt about the profound effect wireless and mobile networks have on everyday life. With the development of wireless and mobile networks, mobile marketing is creating significant benefits and new business opportunities for companies. Thus, mobile marketing – a new form of marketing communication using mobile communication techniques to promote goods, services and ideas – will be the subject of interest for many years to come. Mobile marketing revenues, as indicated by many researchers, make up a large share of m-commerce revenues. The high penetration rate of cell phones has resulted in the increasing use of handheld devices to deliver advertisements of products and services. What is more compelling is that mobile marketing provides for interaction anytime and anywhere, location and situation dependency, targeted addressing of consumers, and inherent measurement of campaign effectiveness.

In general, the success of mobile marketing largely depends on whether it supports advertisers in coping with their major challenge today: getting time and attention from consumers. However, constraints in using both mobile networks and devices impose significant negative influences on the operational performance of mobile marketing campaigns. For example, the small screens of the devices allow the user to view only limited pages of information. In addition, these constraints range from issues of minimal battery power on wireless devices, limited and error-prone wireless links, limited input and output capacity, the diversity of devices, and the myriad differences in user profiles.

TARGETS AND OVERALL OBJECTIVES OF THE HANDBOOK

Our understanding of some of the basics as well as the technology, research, and managerial issues surrounding mobile marketing continues to increase but information on these issues remain sparse. Because the mobile market is still nascent, mobile marketing campaigns still have to be developed by “artists” who rely solely on intuition and personal experience. In order for a professional worker to better perform this task, he should be provided with a handbook, which provides current thinking in designing, managing, and evaluating mobile marketing campaigns as well as best practices. This Handbook of Research on Mobile Marketing Management aims to be just such a book. It will be most helpful as it will provide the current state-of-the-art developments in this area and includes case studies, challenges and trends. Contributions to this important publication will bring together the expertise of authors from different parts of the world and, as a result, the best in thoughts and practices of this fascinating and innovative marketing instrument. Rather than being the work of one author, the book is a collection of edited chapters written by experts and practitioners in the field of business informatics, information systems research, marketing, software engineering, economics, sociology, etc.

The editors received forty chapters initially, but after an extensive peer-review process, only twenty-five chapters were selected for inclusion in this handbook. The diversity in thoughts and experiences of

the authors represents a joint work and cooperative action approach to mobile marketing. The subject area is wide and entails many facets that the book attempts to cover:

- Mobile Marketing Campaign Types
- Mobile Technologies Supporting Mobile Marketing
- Managing Interactions among Mobile Devices, Mobile Applications, and Users
- Location Based Services and Mobile Marketing
- Conceptualization of Mobile Marketing
- Theory Building in Mobile Marketing
- Consumers' and Advertisers' Perception and Attitudes Toward Mobile Marketing
- Cross-Country Comparison of Consumer Attitudes
- Success Factors of Mobile Marketing
- Planning and Management of Mobile Marketing Campaigns
- Mobile Marketing Case Studies

The handbook chapters combine techniques with practice to establish a synergic view of mobile marketing so that it will benefit researchers, marketers, managers in advertising agencies, IT-managers, developers, and students. We hope it is useful to anyone involved in mobile marketing.

ORGANIZATION OF THE BOOK

The book is organized into twenty-five chapters. A brief description of each of the chapters follows:

Section 1: Introduction to Mobile Marketing

Chapter 1, *Mobile Marketing Management: Marketing Objectives, Types and Implementation Techniques*, by Key Pousttchi and Dietmar G. Wiedemann. Mobile marketing is a new form of marketing communication using mobile communication techniques to promote goods, services and ideas. The marketing instrument provides anytime and anywhere interaction, location and situation dependency, targeted addressing of consumers, and inherent measurement of campaign effectiveness. Based on case study research and empirical studies this chapter examines marketing objectives, types and implementation techniques of mobile marketing. Moreover, two instruments for mobile marketing are provided: The campaign type implementation toolbox supports the development of campaigns on a tactical level and the campaign type selection toolbox enables a purposive planning of mobile marketing campaigns on a strategic level.

Chapter 2, *Reviewing Mobile Marketing Research to Date: Towards Ubiquitous Marketing*, by Dimitris Drossos and George M. Giaglis. The purpose of this chapter is to illustrate and reflect upon the extant literature on mobile marketing with a view of identifying contributions, gaps and avenues for future research. The review is based on more than two hundred articles published in leading journals and conference proceedings. The authors first discuss key areas that have already attracted the attention of researchers, such as consumer acceptance in m-marketing and location-sensitive mobile marketing. The authors then focus on the emerging area of ubiquitous marketing and illustrate how mobile and wireless devices and technologies can become the enablers of meaningful dialogues between customers and marketers on an omnipresent basis. Ubiquitous marketing could be the next frontier in electronic commerce and customer relationship management.

Chapter 3, *Framework for Mobile Marketing: The Locales Framework*, by Dennis Lee, Ralf Muhlberger, Mark Brown. This chapter suggests that mobile marketing research take an Interaction Design approach through the adoption of the Locales Framework as an alternative perspective to investigate the context of mobile marketing. The research shows how such an approach can integrate marketing and new technology research, highlighting the issues and opportunities brought about by the technology within a domain context, i.e. mobile marketing. Given that there are not many theoretically based frameworks available to support mobile marketing research, the application of this framework provides a roadmap for future research in mobile marketing and helps build the body of knowledge in this field.

Chapter 4, *Factors Affecting Mobile Advertising*, by Ramin Vatanparast. Mobile advertising holds strong promises to become the most highly targeted advertising medium offering new ways to target messages to users. By utilizing mobile advertising, companies can run marketing campaigns targeted to tens of thousands of people with a fraction of the costs and time compared to other direct marketing mediums. However, as mobile advertising is a novel approach, many aspects of it still need further investigation. Little is known regarding the effectiveness of mobile advertising campaigns and the factors contributing to their success. This chapter aims to provide a comprehensive understanding of the advertising space and its influencing factors. First, the study investigates factors that influence mobile advertising from both the industry's and consumer's point of view. Second, based on a review of previous studies in the field, the author proposes a conceptual model for mobile advertising, which categorizes the factors in different groups and provides a holistic view of their impact in the mobile advertising space.

Chapter 5, *Advertising Challenges in Ubiquitous Media Environments*, by Maria Åkesson and Carina Ihlström Eriksson. Mobile advertising opportunities have attracted interest from industry and academics as a response to the trend of diffusion of new mobile technology. One industry particularly interested in new advertising opportunities is the newspaper industry. Many media houses envision a future multi-channel media environment supporting device independent, anytime, anywhere publishing, i.e. a Ubiquitous Media Environment (UME). In this paper the authors explore how ubiquitous advertising challenges the role of media houses. Ubiquitous advertising refers to advertising in a UME, anytime, anywhere and in any device. Based on results from interviews and workshops with advertisers and publishers the authors discuss how media houses traditional role is challenged. We contribute with an understanding of how media houses can develop their role to succeed with ubiquitous advertising and to m-advertising literature with insights into the dynamics of balancing consumer and advertiser value of ubiquitous advertising.

Chapter 6, *Segmentation Challenges Posed by 'Transnationals' in Mobile Marketing*, by Ibrahim Sirkeci and Richard Mannix. Mobile technologies have posed new challenges for marketers as well as opportunities in an increasingly global market with high human mobility within and across borders. To understand and address customer needs more effectively, this chapter proposes to add new variables to market segmentations formula such as change of residence, movement and commuting distance/hours. A discussion of 'mobile nationals', and 'transnationals', as segments, is undertaken. The transnationals segment includes immigrants, refugees, tourists as well as businesspeople and professionals whose careers span into several countries. These groups create multiple reference points, which are likely to determine their characteristics and behaviour. This is an emerging and promising customer segment particularly for mobile marketing and mobile services. To explore the viability of such a segment, the authors have made use of several existing theoretical frameworks and concepts of segmentation. Future research should focus on the identification of transnational and national mobile segments while also developing and fine tuning the new variables –movement, change of residence and commuting for segmentation theory.

Chapter 7, *Situation Approach as Success Factor of Mobile Marketing*, by Jörg Link and Franziska Seidl. The success of Mobile Marketing is to a large extent dependent on two factors: (1) the situation

appropriateness, where demands are made on the ability of the supplier to process all the central characteristics of a customer situation and turn them into an offer that is appropriate to the situation; (2) the economic success of the supplier depends on the economic potential of the situation and his accurate appraisal of it. The supplier therefore has to model both the specific features and the profit potential of the various customer situations at the right time and in the right way. This chapter is going to demonstrate that the success of Mobile Marketing measures can be guaranteed by a synergic interplay of market and result orientation. On the one hand customer situations are systemized and placed in the context of an integrated Customer Relationship Management system; on the other hand the evaluation of situations, reference object hierarchies, and the various levels of situation profit and loss statements are shown.

Chapter 8, *A Framework for Understanding Mobile Value Offering through Multi-Country Studies*, by Kala Chand Seal. This chapter introduces an integrated way to look into the world of mobile offerings, referred often as m-commerce, - through a cross-country analysis of multiple applications in various countries in Europe and Asia. The authors investigated the role of four dominant factors - technology, government, financial incentives and culture - that influence mobile value offerings and connected them to Methlie and Pederson's (2005) model of extrinsic and intrinsic attributes in mobile space. The authors found that there are many applications and services available that provide added value to customers, but an ill-defined business model prevents their successful realization. An unclear working relationship among the value players and their relative power position in the market also hinder the roll out of many services. The key findings from our research consist of: i. the role of the four factors in development and deployment of m-commerce across multiple countries; ii. The level of influence of each of the four factors has on various applications; iii. the importance of value delivery, not merely the promotion of the "bells and whistles" of new applications, with a clear focus on a viable business model; iv. the role of socio-cultural differences in influencing mobile value applications and acceptance. In addition, the authors found that competition in the early phase of market growth is counter-productive and cooperative relationship between all value players is absolutely crucial for healthy growth of the mobile market and ultimately leads to a win-win situation for everyone.

Section 2: Technology Issues in Mobile Marketing

Chapter 9, *Supporting Marketing Practices: Mobile Network Operators' Value Added Services Changing the Way of Doing Business*, by Süphan Nasir. The concept of mobile communication has been rapidly changing all over the world and the Global System for Mobile communication (GSM) business has been evolving from voice services to value added services (VAS). The rapid growth in mobile technology enables Mobile Network Operators (MNOs) to provide a wide range of VAS to their corporate customers and these VAS change and transform companies' way of doing business. The purpose of this chapter is to analyze the corporate VAS of a MNO, which has gained global acceptance and recognition, as a case study in order to understand how the mobile communication changes the companies' way of doing business. The key supporting mobile technologies, services and solutions, which are provided by the case company to its corporate customers, are reviewed in order to comprehend the mobile technologies, practices, and devices that support mobile business (m-business) and mobile marketing (m-marketing) applications.

Chapter 10, *Mobile Customer Relationship Management (mCRM): Constraints and Challenges*, by Günter Silberer and Sebastian Schulz. Customer Relationship Management is conducive to providing customer information and the correct way to deal with customers. After the advent of the world-wide-web (www), which brought an increase in customer data and intensified CRM discussions in its wake, the authors are now entering the age of computerized mobile communication with diverse possibilities

to enlist the services of mobile people. This chapter outlines the new and latest technological developments and the resultant capabilities of mobile CRM. Looking to a future in which mobile marketing efforts may become increasingly important, the erosion of personal freedom and the threat to this freedom becomes all the more significant. The findings from reactance research do not only specify the reactance conditions but also the reactance consequences. Previous research has sometimes pointed to self-determination as an acceptance factor yet failed to analyze the reactance risk more closely. This chapter will attempt to close this gap. In this respect, the initial findings of an empirical study will be presented, revealing that the acceptance of mobile services is surprisingly low and the reactance risk for mobile services is not to be underestimated, and that reactance involves the corresponding behavior on the part of the user. The plea is to consider the acceptance risk in the mobile CRM of the future and select a customer-friendly permission policy.

Chapter 11, *Employment and Acceptance of Near Field Communication in Mobile Marketing*, by Klaus-Peter Wiedmann, Marc-Oliver Reeh, and Henrik Schumacher. Near Field Communication (NFC) is a short-distance wireless technology which allows user friendly networking of mobile terminals, e.g., cellular phones and PDAs, as it does with stationary units like Automated Teller Machines (ATM). Hardware producers, network operators and service providers are willing to implement NFC technologies in order to offer new services to their customers. The main goal is to increase the attraction of the underdeveloped areas of mobile commerce and make them more interesting for owners of mobile devices. If and how much real potential there is in NFC as a basic technology to really provide new impulses in mobile commerce and mobile marketing so that a higher acceptance can be reached are remaining open questions. This chapter tries to approach these questions and to provide possible answers by outlining relevant applicative examples and further configuration options of NFC technology as well as by discussing their acceptability.

Chapter 12, *Mobile Customer Acquisition in the Swiss Health Care Industry: An Empirical Study*, by Niklas Nohlen, Stefan Smolnik, and Gerold Riempp. Applications based on mobile technologies are predicted to achieve increasing distribution as well as high potential for business processes especially with regard to customer interfaces. This chapter is going to analyze and present perspectives and approaches for initiation efforts by means of mobile technologies of Switzerland's health care industry. On the one hand, acceptance and success factors of such mobile applications are analyzed by means of empirical studies involving customers and companies, on the other hand a prototype of mobile processes for initiation efforts is introduced, which was developed in the course of a case study.

Chapter 13, *Opportunistic Networks as an Enabling Technology for Mobile Word-of-Mouth Advertising*, by Andreas Heinemann and Tobias Straub. The growing share of people using mobile devices, that support wireless peer-to-peer interaction, offers the opportunity to build a ubiquitous infrastructure for electronic word-of-mouth messaging and advertising. This chapter introduces Opportunistic Networks as a layer for one-hop communication that opens up electronic word-of-mouth messaging for mobile devices. The reader will learn about adPASS (short for advertisement passing), a system build on top of Opportunistic Networks for digital advertisement distribution stimulated by an anonymous and tamper-resistant bonus point model. A simulation based on empirical movement patterns indicates the feasibility of our approach. This chapter concludes with a summary and provides an outlook on further research paths starting from the findings.

Section 3: Research Issues in Mobile Marketing

Chapter 14, *Theories behind Mobile Marketing Research*, by Ramin Vatanparast. The future of mobile communication is expected to rely on mobile services and revenue generated through mobile marketing.

Marketing activities supported by mobile devices allow companies to directly communicate with their consumers without location or time barriers. It is becoming vital for today's marketers to understand the processes behind the factors affecting consumers' intention to use and adopt mobile marketing. One can often argue that the mobile marketing adoption is difficult to understand due to a lack of relevant research. However, much research has already been conducted on the adoption of mobile services and technology acceptance that is likely can support mobile marketing research. Thus it is essential for mobile marketing researchers to get a through understanding of the theory behind mobile service adoption and technology acceptance. Theories in this area have been developed gradually and built up on each another. This chapter covers some of the theories and related models and show how those could be used in mobile services and mobile marketing research.

Chapter 15, *In Search of Successful Mobile Advertising: Consumer and Business Perspectives*, by Stuart J. Barnes, Eusebio Scornavacca, Jonathon McKenzie, and Amy Carroll. The deployment of SMS-based marketing campaigns has been noted as a very successful mean of reaching consumers. With this mind, this chapter reports on three different studies that the authors have conducted aimed at better understanding what makes SMS marketing campaigns successful. The studies were conducted in the past four years and they explore business as well as consumer perspectives: (i) a consumer scenario perspective, which examines the importance of three factors in SMS advertising acceptance; (ii) a consumer decision perspective, which analyses the opt-in decision for an SMS campaign; and (iii) a business, perspective examining managers' perceptions of the critical success factors in advertising campaigns. The chapter rounds off with conclusions and recommendation for future research and practice in the area of mobile advertising.

Chapter 16, *The Impact of Gender and Age on Consumer Responsiveness to Permission-Based Mobile Advertising*, by Heikki Karjaluo, Heikki Lehto, and Matti Leppäniemi. This chapter investigates the impact of gender and age on mobile marketing responsiveness among regular customers of Finnish night club chain. The study develops sixteen research propositions which are tested with a sample of 8578 members of the company's permission-based, opt-in mobile advertising list. The results contribute to mobile marketing and technology acceptance literature in various ways. First, the authors find support for four out of eight gender related propositions. Second, five out of the eight age-related hypotheses are supported. The results further show that among opt-in customers, gender and age explain various antecedents of intention to engage in mobile marketing. The study provides several theoretical and managerial contributions and outlines vital avenues for further investigation in the field.

Chapter 17, *Mobile DM Coupon Promotion in Japan: A Case Study on Response Behavior Changes in Services Consumption*, by Fumiyo N.Kondo, Yasuhiro Uwadaira, Mariko Nakahara, and Shahriar Akter. This chapter investigates the changes in customers' responses to mobile direct mail (DM) coupons on the shop visit probability (SVP) of a beauty parlor. Two experiments were carried out to examine the promotional effects of mobile DM coupons. The first experiment, conducted in 2004, compared mobile DM coupons with postcard DM coupons. The mobile DM coupons were found to have no effect on SVP, although positive effects were observed for postcard DM coupons. The second experiment, conducted in 2005 with three types of mobile DM coupons, compared the responses of new customers with those of repeat customers. The results varied according to the settings but demonstrated stability in the same settings. For repeat customers, mail with shop's telephone number for reservation had positive effects on SVP; however, ordinary mail had no effect, while hyperlink mail had negative effects. For new customers, all three types of mobile DM coupons exhibited positive effects on SVP.

Chapter 18, *Mobile Store Environment Dynamics: An Interdisciplinary Approach*, by Adam P. Vrechopoulos, Emmanouela E. Manganari, and George J. Siomkos. The development and rapid diffusion of m-commerce has attracted lately a great deal of research interest. Researchers from many

different disciplines and domains (e.g. Strategic Marketing, Human Computer Interaction, Consumer Behavior, Environmental Psychology, Information Technology, Retailing, E-Commerce, etc.) attempt to examine and better understand this new medium, following different scientific paths. The current chapter constitutes an interdisciplinary research effort on that field placing particular emphasis on the design qualities of the mobile store environment-atmosphere and its effects on users'/consumers' behavior. To that end, the concept "m-atmospherics" along with a corresponding conceptual model are introduced as the theoretical vehicles that can well support the initiation of future research attempts measuring m-atmospherics effects on consumer behavior.

Chapter 19, *Mobile Loyalty Programs: Relevance for the Relationship Management and Consumer Acceptance*, by Andreas Mann and Jan Prein. Mobile loyalty programs hold various advantages to companies compared to traditional card-based programs. Mobile customer cards enable companies to precisely assign advertising re-actions and purchase data to individual customers. For this reason customer retention activities can be adjusted to individual preferences and the situational context. However, any successful implementation of mobile technologies in consumer contexts depends primarily on consumer acceptance. In this chapter, the authors begin by illustrating characteristics of mobile loyalty programs, particularly as it relates to relationship management. Following that the authors identify and analyse drivers affecting the acceptance of mobile loyalty programs and present the results of an exploratory survey on consumer acceptance by using a fictional mobile customer card offer.

Chapter 20, *Analyzing the Forwarding Behavior in Mobile Viral Marketing: An Empirical Study*, by Dietmar G. Wiedemann, Tobias Haunstätter, and Key Pousttchi. As mobile devices are personal communication tools, they are platforms for word-of-mouth marketing. Mobile viral marketing is tremendously attractive for marketers but neglected by academic research. Surprisingly, relatively few studies are directed at its basic elements, i.e., directed at willingness to forward different mobile viral content, understanding characters of those who forward mobile viral content frequently, and characters of the recipients of this content. This chapter presents the findings of an online survey conducted to empirically investigate the consumers' intention to forward different kinds of mobile viral content, to identify the primary target groups for the mobile viral marketing in terms of their forwarding behavior, and to analyze to whom mobile viral content is forwarded.

Chapter 21, *Understanding Consumer Recommendation Behavior*, by Wen-Kuo Chen, Heng-Chiang Huang, and Seng-Cho T. Chou. Research shows that the use of mobile phone services is surprisingly low because users would not like to pay money without first using services. The authors consider that a customer is not only a service user, but also the partner of a firm. Therefore, this chapter investigates how the users recommend mobile phone services to other potential customers based on their experiences. The authors focus on two determinants of customer recommendation behavior, namely, overall satisfaction and flow experience. The authors also propose a number of hypotheses related to the constructs of overall satisfaction, and test them using data provided by 3G mobile service subscribers. The results contribute to our understanding of how customers are willing to make recommendations to others. Besides increasing customer satisfaction, the authors should consider a mediating factor—users' flow experiences. The findings provide empirical support for most of the hypotheses. The theoretical and practical implications of the findings are also discussed, and suggestions for further research are offered.

Section 4: Managerial Issues in Mobile Marketing

Chapter 22, *Integrating Mobile Marketing into the Marketing Communication: Exemplification of Mobile Marketing Campaigns*, by Süphan Nasir. With the increasing growth and sophistication of mobile communications, companies integrate the mobile channel into their marketing communication and

campaigns. Companies are able to execute very different and creative mobile marketing campaigns by using a wide range of mobile platforms such as Wireless Application Protocol (WAP), Short Message Service (SMS), and Multimedia Message Service (MMS). The purpose of this chapter is to review and exemplify the concepts, objectives, strategies and promotional tactics associated with mobile marketing campaigns; so that the review of relevant literature and exemplification of mobile marketing campaigns provide an insight into the nature of mobile marketing campaigns.

Chapter 23, *Interactive Customer Retention Management for Mobile Commerce*, by Dirk Möhlenbruch, Steffen Dölling, and Falk Ritschel. Mobile Commerce is of growing interest for vendors and customers and with that its importance within the mix of marketing and distributing channels increases. This is of particular significance when customer retention and improved service are essential success factors. Because of their focus on customer integration the instruments of Web 2.0 offer new interactive possibilities for customer retention management. With a systematization of the new web-based applications linked to an evaluation of existing possibilities of customer retention this chapter offers a reasonable frame of reference for the utilization of Web 2.0 within the success chain of customer retention management in Mobile Commerce. Combined with existing studies of the acceptance of Web 2.0 recommendations for a successful timely order of introduction are offered to reach optimal diffusion and retention rates.

Chapter 24, *Mobile Business and Mobile TV: Available Technologies, Future Opportunities and New Marketing Trends*, by Marco Garito. The increasing availability of affordable mobile business services (or “m-services”) across different telecommunication carriers and platform is now a reality that is changing the way customers perceive products and solutions: mobile TV, one of the latest m-services, can be now seen either as a stand-alone channel or in conjunction with other media, thus providing several levels of engagement and interaction. Marketeers are now talking about “experiential marketing” to explain how customers and businesses are now reacting to market stimuli: Philip Kotler talked about “sense and respond” in his book “Marketing moves”. Technology development is now taking a step forward enabling customers to be users and creators of products, services and brand image. This chapter provides an overview about traditional mobile marketing and mobile TV, describing how those interact and how business can be affected in some crucial areas: platform interoperability and revenue models. Some real examples of mobile initiatives are also provided.

Chapter 25, *Brand Driven Mobile Marketing: 5 Theses for Today and Tomorrow*, by Christopher Quente. Despite the fact that the mobile phone is a perfectly suited advertising medium also for brand campaigns a creative perspective is not only desirable but also necessary. Because: Without creativity, the latest mass medium would be swiftly rendered desolate. In the creative conceptual design of brand campaigns it is important above all to carry out advertising not only on the mobile phone but with it. On the basis of five theses it is illustrated how the mobile phone becomes the essential building block within commercial multi-channel concepts. One key issue being the telling of ‘brand stories’, told across various media or ‘stages’. If the stories being told are compelling enough one can convert brand supporters into brand addicts, who in the best case scenario wouldn’t want to miss a single performance of their favorite brand.

Key Pousttchi and Dietmar G. Wiedemann

Editors

wi-mobile Research Group

Chair of Business Informatics and Systems Engineering

University of Augsburg

2009