"FACTORS AFFECTING CONSUMER ATTITUDE IN PERMISSION BASED MOBILE MARKETING: AN EMPIRICAL STUDY FOR TURKEY"

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Abstract

This dissertation studies mobile marketing, the permission and user attitude for acceptance of mobile services by consumers accessed mainly by mobile phones. The objective is to analyze the factors affecting consumer attitude in permission based mobile marketing, which shall help extending the use of mobile services. The model, based on four research hypotheses, indicates that consumer attitude in permission based mobile marketing is mainly driven by four factors;

Usability; is explaining the behavior of the consumer from usability point of view. The offer in the message should be delivered on the right time at the right place. It should be useful for the consumer it should not be recognized as "a spam" and the consumer attitude in mobile marketing may increase.

Acceptance; is explaining the behavior of the consumer from acceptance point of view. Consumer's perceived risk to share their information should be "low". Offers in the message should not ask for detailed personal information.

Remembrance; is explaining the behavior of the consumer from remembrance point of view. The probability for the consumer to remember any kind of offers made in the past may related to the "differentiation" of the offer itself and the value proposed to the consumer. Even if the consumer will not participate in a mobile marketing immediately, the attitude of her may increase later on according to this factor.

Interaction; is explaining the behavior of the consumer from Interaction point of view. Consumer's attitude in permission based mobile marketing may a part of their social behavior which is mainly affected from their environment. A consumer from the youth segment using mobile phones as a life style may be more inclined towards.

The use of the aforementioned four factors in one model differs from the work of other scholars. The factor remembrance is analyzed the first time in literature. The findings provide several conceptual and managerial insights into the role of mobile advertising today and in the near future.

"TÜKETİCİLERİN İZİNLİ MOBIL PAZARLAMAYA KATILMASI EĞİLİMİNE ETKİ EDEN FAKTÖRLER: TÜRKİYE ÜZERİNE EMPİRİK BİR ÇALIŞMA"

Özet

Bu doktora çalışmasında mobil pazarlama çalışmalarının mobil telefon kullanıcıları açısından algıları ve izinli pazarlama konusundaki davranışları incelenmektedir. Araştırılacak olan faktörler ile hizmetlerin bu ve yeni alanlarda geliştirilmesine olumlu katkı yapılması hedeflenmektedir. Mobil telefon ile tüketicilere fayda sağlayacak servislerin önündeki en büyük engel aslında tüketicilerin, "kişisel" olan telefonları üzerinden "rahatsız" edilmeleridir.

Tüketicilerin mobil pazarlama çalışmaları konusunda ilgilendikleri ürün ve servislere izin verme eğilimlerine etki etmesi olası olan dört faktör sözkonusudur;

Kullanılabilirlik; tüketici bakış açısından önerinin kullanılabilirliğini açıklamaktadır. Mesajda tüketiciye sunulan öneri doğru zaman ve doğru yerde ulaştırılmalıdır. Öneri, tüketici için kullanılabilir olmalı ve öneri tüketiciye özel olmalıdır Bu durumda tüketicinin izinli mobil pazarlama eğiliminde bir artış gözlenmesi olasıdır.

Kabul edilebilirlik; tüketici bakış açısından önerinin kabul edilebilirliğini açıklamaktadır. Tüketicinin bilgisini paylaşırken algıladığı risk düşük olmalıdır. Öneride tüketiciden çok detaylı özel bilgilerin istenmemesi gereklidir.

Hatırlanabilirlik; tüketicinin bakış açısından önerinin hatırlanabilirliğini açıklamaktadır. Tüketici tarafından önerilerin hatırlanması olasılığı önerinin farklı olmasına göre tüketicinin izinli mobil pazarlama eğilimine bir artış getirmesi olasıdır.

Etkileşim; tüketicinin bakış açısı ile öneride etkileşim ortamını açıklamaktadır. Tüketicinin bulunduğu çevre tüketicinin izinli mobil pazarlama eğilimine etki etmesi olasıdır.

Çalışmada açıklanan dört faktörün bir model içerisinde ele alınması diğer akademik çalışmalardan en ayırt edici özelliğidir. Hatırlanabilirlik faktörü akademik olarak ilk kez bu çalışma ile tanımlanmış ve analiz edilmiştir. Bu özellikleri ile yeni yapılacak olan çalışmalara ışık tutacaktır.

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Many individuals contributed to this project. I want to address my sincere thanks to the Turkcell (the largest and 5th largest GSM operator of Turkey and Europe, respectively) team, with whom we set analyze the first literature review. Their insights into the future possibilities of mobile services helped to prepare a model to be used in the next generation of mobile services.

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List of Abbreviations

CE: Consumer Electronics

1G: First Generation

2G: Second Generation

API: Application Programming Interface

ARPU: Average Revenue per User

ASP: Application Service Provider

GPS: Global Positioning System

GUI: Graphical User Interfaces

HTML: Hyper-Text Markup Language,

JAVA: A Hardware-Independent Programming

MIDP: Mobile Information Device

MMS: Multimedia Messaging Service

MVNO: Mobile Virtual Network Operator

OEM: Original Equipment Manufacturer

PSMS: Premium SMS

R&D: Research and Development

SIM: Subscriber Identity Module card.

SMS : Short Message Service.

UI: User Interface

VAS: Value-Added Service

Chapter

1 Introduction

1.1 Aim of the Study

Permission based mobile marketing represents all marketing activities made upon permission from the receiver of the offer through mobile phones or devices. Mobile marketing has new opportunities for marketers to get immediate access to the consumer real time and to propose an offer "on the way". The critical point may be the misuse of information and disturbance of the consumer. Permission based mobile marketing is therefore a new and developing area for researchers.

The basic aim of this work is to analyze the factors affecting consumer attitude in permission based mobile marketing. The model is built on the feedback from a relevant survey to 361 GSM subscribers in Turkey. The survey is established to construct several perception factors (Usability, Acceptance, Remembrance and Interaction) that are thought to influence consumers' attitude in permission based mobile marketing. With that data, a set of variables will be constructed to investigate the relationship between perception levels and to determine if different perception levels result in different attitudes.

1.2 An Overview of the Telecommunications Industry

According to the European classification of activities the telecommunications industry is more than just telephone services [78]. In addition to the transmission of information this group also covers activities which offer access to a certain networks including the internet.

The definition of the industry includes the distribution of sound, images, data or other information via cables, broadcasting, relay or satellite networks. It encompasses telephone, telegraph and telex communication, the transmission of radio and television programs, internet access provision and the maintenance of networks [78].

The Telecommunications industry experienced considerable growth in the second half of the 1990s, before deregulation and privatization of former players changed the landscape [77]. In recent years the increased competition has caused a fall in prices which positively affects the consumer side and enables higher penetration rates. In comparison to other industries the telecommunication industry has some main characteristics listed in Table 1.1.

Characteristics	**Telecom Services**
Market	Large number of customers
Industry structure	Capital intensive
Company size	Large
Service	Infrastructure based
Business model	Large economies of scale

Table 1.1 Characteristics of the Telecommunications Industry, Gallacci [77]

The telecom services market is growing at a slower rate compared to previous years. The slowdown has occurred mainly for fixed telephony, while mobile services and internet use are growing at a higher rate. The popularity and growing use of the Internet has caused an explosion of data services traffic, especially e-mail, web browsing and professional applications. Data is expected to overtake voice as the main source of traffic on global telecommunications networks in the coming years, and this represent the main challenge of telecom services operators today.
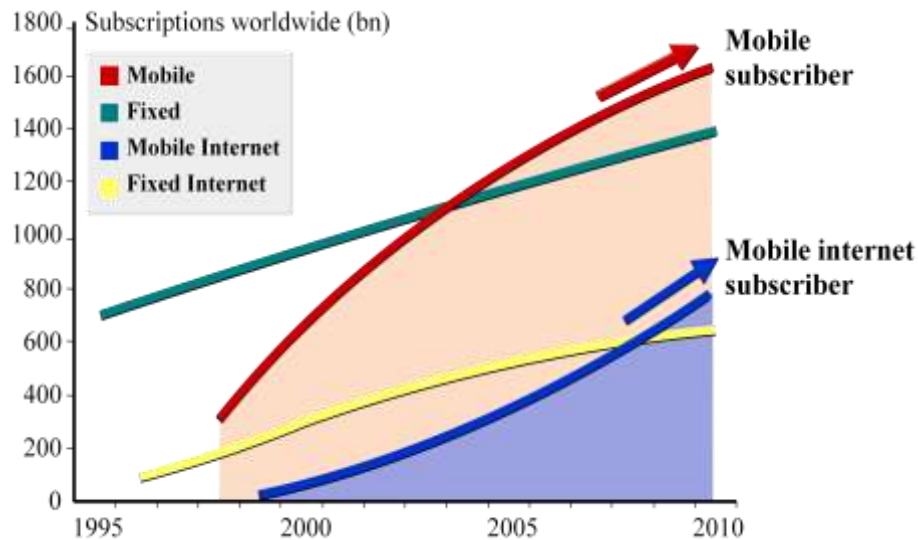
Figure 1.1 Mobile Subscriber Penetration, ISTAG [84]

Moreover, decreasing costs for broadband access to the web could stimulate greater use of mobile and broadband applications also by smaller firms, and allow them both to save money and increase productivity

1.3 An Overview of the Wireless Industry

According to the American Standard for Telecommunications, wireless is "descriptive of a network or terminal that uses electromagnetic waves (including radio frequency, infrared, laser, visible light and acoustic energy) rather than wire conductors for telecommunications." [77]. With a definition as broad as this, the wireless industry encompasses production of mobile devices like mobile phones, laptops and personal digital assistants (PDAs), as well as all the hardware, software and services that enable communication using these devices. The operation of the networks that allows communication to take place is also included.

Mobile operators in particular are worried about tapering revenues from voice traffic and have shifted their investment strategies to promote mobile data transmission, which offers higher margins than voice traffic. The wireless industry has some unique characteristics to take into consideration. Some of these characteristics are listed below [77]:

- There is an ongoing standards battle across the value chain. This includes operating systems, transmission standards, browser protocols, development platforms and devices.

- The upstream value chain is regulated. In the U.S.A., the Federal Communications Commission (FCC) governs infrastructure building and regulates spectrum use.

- Rapid technological advancement can be witnessed at every stage of the value chain. This phenomenon is exemplified by the continuous developments of innovative products

- Products have short life cycles, as there is a constant need to keep up with the latest technologies and standards.

- Incumbents like Nokia, Ericsson and Motorola are vertically integrated and straddle across the value chain, making their positions and bargaining powers very strong.

The above reasons contribute to a volatile and changing environment, mainly affected by consumer preferences and technology.

Wireless industries will develop very fast and will make important changes on various industries as shown in Figure 1-2 for the travel industry. The loop explained in the figure describes the "ease of use" and the maximization of the perceived utility from the consumer point of view. There is no direct interaction to any person in the scenario and the cycle is fully automated. These kinds of experiences are reality more often in consumers' daily life.

Figure 1.2 Wireless in the Travel Industry

1.4   The Mobile Marketing Ecosystem

The Mobile Marketing Ecosystem is driven by a number of technical, regulatory, commercial, social and legal components. It is a complex network of different industries and companies, and to be successful in leveraging the mobile channel, being aware of how value is generated through this channel and within the system is important for brands, content owners, marketing agencies, and other industry participants.

Michael Porter's seminal work on value chain and value system frameworks provides strategic concepts for evaluating businesses and industries [79]. Managers use Porter's framework to identify the unique technological and economic activities of a business or industry, and the critical linkages between each activity. Once these activities are identified, managers can focus on their core competencies and solidify their position within the industry [79]. Porter's work, however, takes a two dimensional approach at both the business and industry level. With his value chain framework, a company uses primary and support groups to create products or services in order to add value. A company can collaborate with another company that will add value, this second company can perform another handoff, and this process

continues through the industry value system until the customer consumes the product.

As early as 1993, however, scholars recognized that an industry's value system is not limited to a simple linear two-dimensional view; rather, it is made up of a constellation, or a strategic network, of companies that do not necessarily work in a serial fashion as in the traditional value chain models [77]. A better way is to understand the interrelationships between each network. It is not that Porter necessarily missed anything with his original work, but as the Internet and wireless networks emerged, standards solidified, globalization sped up, new processes, technology, economic models, and business practices formed, and the landscape of doing business altogether changed. This change does not mean that fundamental economics no longer apply. Everyone throughout the strategic network must receive at least marginal returns, otherwise they will not survive in the network, or the network will be unstable and lasting value will not be created. These changes are pervasive, dynamic, and encouraged by participants in the mobile ecosystem, including organizations mobile operators, marketers, aggregators, application providers and other participants.

Mobile services with their unique capabilities and opportunities were exclusively "bundled" within the mobile operators' technology network, a "walled garden" controlled by the mobile operators with limited access provided to others. Anderson and Williams have documented in detail the "unbundling" that is now occurring within the mobile operator's value chain system [80], and it is this unbundling that has opened mobile marketing to brands and content owners, and created the fertile ground for existing and new industry players like mobile application providers, aggregators, and enablers. The discrete application providers and application solution providers (also known as "mobile ASPs") are offering exciting and novel technology for a wide array of mobile initiatives and mobile management systems. The aggregators are providing single-point connectivity with all the different mobile operator networks. The enablers are providing foundation technology, processes, regulations and related support to the value activities within each sphere. With the controlled and managed opening of the mobile operator's walled garden, traditional

brands, content owners, and marketing agencies are now able to use mobile networks for direct customer engagement. Brands are not only distributing services and content through the channel, but are using it for brand awareness, prospecting, customer acquisition and customer retention purposes.

New mobile content, "experiential marketing" and interactive mobile services are also emerging. An excellent example is Counts Media and its Yellow Arrow program. The Yellow Arrow program invites anyone to create a mobile experience by placing Yellow Arrow stickers at locations or on objects around town that they think is of interest, cultural importance, or just fun, and they then "program" the arrow via SMS with a text story or information explaining its significance. The sticker has a unique keyword written on it that other people will see. People text message this keyword to a short code, which results in a reply text message containing the story. For example, someone could leave a Yellow Arrow at a warehouse door entrance, leaving a story that will explain either by text or voice the history of the location– "this is where Andy Warhol's original Factory was located". Leveraging multiple strategic partners throughout the ecosystem network, Counts Media created a new genre of service—the "mix reality entertainment experience"— by turning the world into a canvas and using the mobile phone as the brush.

Other emerging services are also prevalent. For example, the Coca-Cola Company has recently enabled the purchase of branded mobile content from its vending machines. Disney is launching their own proprietary mobile network (MVNO), and is also developing new channels, including mobile, to deliver its content. Disney CEO Robert Iger believes that, "In the future, there will be a percentage of people who will only receive our content on devices other than television sets" (Wall Street Journal, 2005). Mobile application providers, content providers, aggregators and new interactive marketing agencies, among others, are joining forces within the Mobile Marketing Ecosystem's strategic network to help these and other brands succeed.

None of this would have been possible just a few years ago if it were not for the changes that are taking place in the ecosystem. The Figure below (Figure 1.3)

illustrates the new and dynamic Mobile Marketing Ecosystem, a strategic network encompassing all industries, marketing disciplines, and economic and technical models [87]. It is comprised of 4 interconnecting spheres; Product & Services (brands, content owners and marketing agencies), Applications (discrete application providers and mobile ASPs), Connection (aggregators and wireless operators), and Media and Retail (media properties, "brick 'n' mortar" and virtual retail stores). Various enablers provide the foundation for each particular sphere. Players within these spheres work in concert to deliver a rich experience to consumers. The Mobile Channel Value Chain is the path by which the actual mobile communication and interactivity takes place between the Product & Services Sphere and mobile subscribers (consumers), however, consumer demand must first be established. To create this demand, products, services, events, and content programs are promoted through the Media and Retail Sphere's various traditional channels. By adding the mobile component, traditional media is excluded from its previous limitations and becomes a true interactive medium. Print media, for example, is a relatively static medium that is normally only passively viewed by the consumer, with limited access to respond promptly to a call to action. With a mobile component added, the consumer can execute a call to action anytime, anywhere it is viewed. Once a mobile relationship is established with the consumer through the Media & Retail Sphere, brands and content owners can then request permission to communicate directly with the consumer further through the mobile channel.
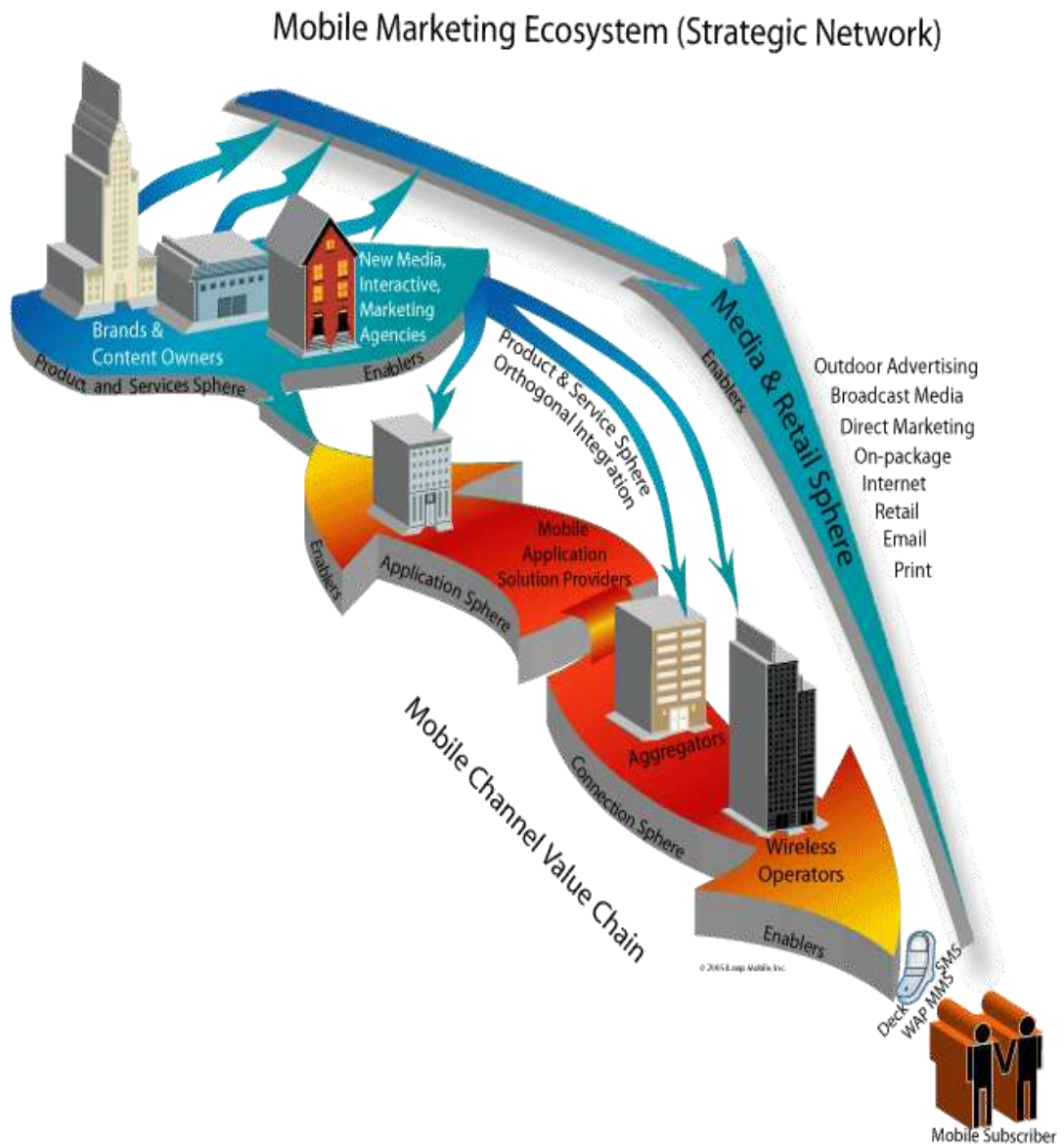
Figure 1.3 Mobile Marketing Ecosystem, Becker [87]

It is imperative that companies from the different spheres learn to coordinate their efforts and develop strategic relationships with players in the other spheres of the Mobile Marketing Ecosystem. While it is tempting for a company to try to be everything to everyone and attempt to horizontally integrate multiple functions across multiple spheres, they should take heed before doing so since each sphere comes with its own unique business models, regulations, technologies, relationships, norms and practices. It is vital that companies focus on their core competencies and work collaboratively with other players within the strategic network to best service the market. If major players attempt to control areas that are outside of their core competencies, the most likely result will be an inefficient industry plagued by high

costs, slow reaction to market needs, consumer dissatisfaction, and the stunting of new technologies and creative ideas. This issue is critically important to mobile industry participants and business scholars as well. Scholars can help analyze, define, and empirically test the links between value creation activities within the ecosystem in order to provide managers with appropriate system models and decision-making data. Hereafter, the ecosystem will continue to mature and stabilize. The participants in the different spheres can create lasting value for the industry and consumers by co-operation.

1.5 Marketing Revolution

Marketing is facing a mid-life crisis. Emerging as an academic discipline 80 years ago and as a corporate discipline around 50 years ago, marketing has become the sophisticated customer and market discipline known today, with proven results in many industries [85]. Marketing is struggling to cope with a customer whose independence is undermining every conventional effort to communicate effectively with them. Thirty or more affluent years in a highly commercial and largely free market economy has given birth to a new type of customer whose needs, wants and approach is totally different from those of consumers of 50 years ago. Customers have become more demanding of how marketers interact with them and how they treat them across segments, products and channels. In a world where today's best practice becomes the basic standard of tomorrow, it is becoming harder to retain and attract customers cost-effectively. This has raised questions about marketing effectiveness in the boardroom and about the role and definition of marketing generally. Marketing must recognize and engage with this new customer to succeed in this new customer-driven age.

Revolution is not about functional marketing issues. It is about recognizing how external events affect the entire business process. As long ago as 1954 management guru Peter Drucker [86] wrote, 'Marketing is not only broader than selling; it is not a specialized activity at all. It is the whole business seen from the point of view of the final result, that is, the customer's point of view.'

Today the problem is how companies can manage itself around the customer. If this is done at the expense of staff, management, suppliers or other stakeholders it can turn into a stick to beat up the rest of the company, whilst marketing remains proudly virtuous. It is important to balance the expectations of both the company and the customer for this to work.

First and foremost marketing is an attitude of mind, company-wide and in the long run it is getting customers, staff, managers, suppliers and owners going where they want to go together. Whether the customer is 'always right' is irrelevant. The truth is more subtle. Customers do not always know best, especially in technical or complex markets. Sometimes marketing's role is to lead the market, not follow it. The key is to focus on balancing the different stakeholders' interests. Successful companies get their internal act together by creating value for all their stakeholders. The marketer's role is to be expert in understanding the customer as stakeholder, to become the customer advocate, and to work closely with the other groups that are experts in understanding and possibly representing the other stakeholders.

Once marketers understand that creating value for customers and other stakeholders is not done just inside marketing departments, they must engage with processes. These include [85]:

- A strategy process; aligning customers' wants and needs to the businesses' strengths and objectives;

- An innovation process; creating a steady stream of new products and services that people want;

- An efficient operations process;

- A process for going to market, promoting, selling, channels, service, relationships.

Marketers quite clearly have a role to play in the first three but they also have a strong leadership role in the last one. Operations or a 'customer service' channel risks

losing the customer focus is vital. Running across these processes are very important functional processes: people and organization, technology, information and finance.

1.5.1   Internet Marketing

In the past internet marketing thought to be banner advertising and worked as a means to generate Web site traffic. A few online marketers were using Usenet Newsgroups to develop a reputation for themselves and to generate traffic for their Web sites. Very little was known about search engine ranking.

Marketers realized that it wasn't just any traffic that they wanted, but more targeted traffic. Internet marketing is now using much different tools to maximize its efficiency and the leading techniques are as follows [68];

- Search engine optimization or organic optimization; search engines are one of the most used services on the internet which gives consumers the ability for access to any kind of information. Users are recognized by the keywords they did search for and marketers are trying to give messages about their products or services accordingly. This kind of technique is called as search engine optimization. In the future, quite likely the results will be different for different people doing a search of the same keyword. This is called the organic optimization of search engine optimization.

- The importance of the link strategy; This is related to finding sites that related to different products or services but had the same target market as theirs and requesting a link from other sites.

- Internet advertising

  - Rich media; "Rich media" is a term used to describe a wide variety of media experiences that offer an enhanced interactive experience. Rich media would include things like streaming audio, streaming video, applets that allow user interaction, and special effects.

  - Search engine; Search advertising is very straightforward— advertisers bid on specific keywords or keyword phrases to impact

their position of the text ads on search results pages, their ad appears when someone does a search on the chosen keywords or keyword phrases, and if (but only if) someone actually clicks on their ad and is delivered to their site, the advertiser pays.

- o Contextual advertising; It is important to reach potential customers with the "right" marketing message at the time they are looking for types of products or services. Contextual advertising is providing a targeted ad on a Web page based on the content of that Web page.

- o Behavioral advertising; It is advertising to Web users based on their previous behavior or activity on the Web. It is the process of identifying potential customers based on the searches they have done, sites they have visited, and specific actions they have taken, and then serving them an appropriate ad at the optimal time.

- Affiliate marketing; Affiliate marketing is the use by a Web site that sells products of other Web sites, called affiliates , to help market the products. Amazon.com, the book seller, created the first large-scale affiliate program and hundreds of other companies have followed since.

- RSS; "RSS" is an acronym for Really Simple Syndication. RSS is a format for syndicating news and other content that can be broken down into discrete items. Once information is in RSS format on a site, an RSS reader can check the feed for updates and react to the updates in a predefined way. The content that is provided usually includes a headline, a description, and a link to the Web page that provides all the details. The RSS readers automatically retrieve updates from sites that peoples have subscribed to, providing them with up-to-the-minute content as it is published.

- Blogging; Consumers' desire to have more control over "real" information as opposed to what the media wants them to have has grown significantly over the last few years. Blogs often are seen to be unbiased consumer-generated content and thus have grown in popularity over that same time period. The technology enables anyone to broadcast information, pictures, and videos worldwide in a matter of minutes. Blogs tend to focus on a niche, and every niche is covered. There are blogs related to the music industry, cheat sheets

for online games, children's products, travel in Russia, and everything in between. Business-to-business blogs are one of the fastest-growing segments. Blogs are informal—great for relationship building. Blogs are easy to maintain. Blogs are informative. This can be a great feature as long as customers are going to post positive comments. They are usually updated daily.

- Podcasting/videocasting; The term is a combination of two terms— "broadcasting" and "iPod"—the latter referring to Apple's portable digital audio player, although any MP3 player can play the content. Podcasting is basically a method of publishing audio content via the Internet, allowing users to subscribe to a feed of new files—usually MP3s. Podcasting became very popular in late 2004. People can browse the Internet to find podcasts that are of interest to them; people subscribe to those that they are interested in and then sync them to their MP3 player to be able to listen to them anywhere, anytime. Once people subscribe to a podcast, their devices will automatically check for updates and download new programs to their computer.

1.5.2   Direct Marketing

Direct marketing is a sub-discipline and type of marketing. There are two main definitional characteristics which distinguish it from other types of marketing.

- It attempts to send its messages directly to consumers, without the use of intervening media. This involves commercial communication (direct mail, e-mail and telemarketing) with consumers or businesses, usually unsolicited.

- It is focused on driving purchases that can be attributed to a specific "call-to-action." This aspect of direct marketing involves an emphasis on to track and measure "response" from consumers regardless of medium.

Direct marketing is attractive to many marketers, because in many cases its positive effect (but not negative results) can be measured directly. For example, if a marketer sends out one million solicitations by mail, and ten thousand customers can be tracked as having responded to the promotion, the marketer can say with some confidence that the campaign led directly to the responses. The number of recipients

who are offended by the junk mail/spam, however, is not easily measured. By contrast, measurement of other media must often be indirect, since there is no direct response from a consumer.

While many marketers like this form of marketing, some direct marketing efforts using particular media have been criticized for generating unwanted solicitations. For example, direct mail that is irrelevant to the recipient is considered junk mail, and unwanted email messages are considered spam. Some consumers are demanding an end to direct marketing for privacy and environmental reasons which direct marketers are able to provide by using "opt out" lists, variable printing and more targeted mailing lists.

There are different forms of direct marketing activities listed below; but direct marketers are using also classical methods like door hangers, package inserts, magazines, newspapers, radio, television, email, internet banner ads, pay-per-click ads, billboards, transit ads which are asking the consumer for "call-to-action"[88].

- Direct mail; marketers send paper mail to customers on a list.

- Telemarketing; marketers contact consumers directly by phone.

- Email Marketing; marketers send e-mail to customers on a list.

- Broadcast faxing; it's an old method which is no more used, where marketers send fax to customers on a list.

- Voicemail marketing; marketers send their guided voicemail to accomplish personalized messages to customers on a list.

- Couponing; marketers offering printed or digital coupons to customers asking them to use it for a "call-to-action" activity.

- Direct response television marketing; marketers explain a product in detail on TV and ask viewers for an immediate response (typically to call a phone number on screen or go to a website).

- Direct selling; it is the sale of products by face-to-face contact with the customer.

1.5.3 Viral Marketing

Viral marketing is any online marketing technique that encourages Web site visitors or digital content recipients to pass on a marketing message to others, creating an exponential increase in the message's exposure. Marketers hope their marketing message spreads like a virus, one minute it's nowhere and the next minute it's all over the place.

One of the sales elements that work hand in hand with branding is viral marketing. These two marketing aids complement one another and help to make one another more powerful. Viral marketing is a new phrase that means "word of mouth" marketing. What viral marketing does is to "spread your message" within the community. It's like free advertising because customers or even potential ones will recommend these products and services to others who will recommend it to others and so on. In many ways, this kind of promotion acts just like a virus in that it spreads from person to person almost without them being aware.

There are two types of viral marketing [68]:

- Direct Viral Marketing – occurs when a client spreads the awareness of your product or service to others simply by using the product or service. Some of the online e-mail services are examples of this. When someone sends an e-mail using these kinds of services, each email automatically includes a message at the bottom of the e-mail that states the name of the email service they are using.

- Indirect Viral Marketing – happens when a client must actively find another client in order for both of them to benefit by using the product. An example of this is when someone wants to use an Internet service like a chat or messaging service, and they have to solicit the assistance of another user in order to implement the service. For example, if one person wants to send instant online messages to another person, that other person also needs to have the same software installed in order for the messaging to work. This

means that one person needs to implore another to also install a messaging utility. (e.g., MSN messenger or ICQ)

Providing a free screen saver, a background image, free airtime upon registration could be ways customers will spread the information. Another idea is to provide some free services to visitors of the web site. Free advice on technical or other complicated topics could be useful – quotes or definitions are useful to some people. Contests are another way of attracting attention especially in the case of mobile marketing. There are many ways that a message can be made to contain items that customers will want to tell others about. Those who used the product or service and make it valuable will have a much greater chance of reaping the benefits of viral marketing.

1.5.4   Mobile Marketing

Mobile marketing can be defined as "Using interactive wireless media to provide customers with time and location sensitive, personalized information that promotes goods, services and ideas, thereby generating value for all stakeholders" [5]. This definition includes an important concept of adding value not just for the marketing party, but also for the consumer. The literature shows a variety of technological platforms such as wireless application protocol (WAP), SMS, and multimedia message service (MMS) that are available to support mobile marketing applications [55].

SMS is the most popular mobile data application to date, showing phenomenal usage with 580 million mobile messaging users sending over 430 billion messages worldwide in 2002. Text message services have been hugely popular for interpersonal communication, allowing users of all ages to exchange messages with both social and business contacts [55]. Xu, Teo, and Wang [73] identified three consistent success indicators for SMS messaging. The first factor is the cost effectiveness and interoperability of the wireless infrastructure, the second is the high

penetration of mobile phones (ubiquitous penetration levels of over 80% in some countries), and the third is the relatively low cost of the SMS messaging service.

Countries such as Japan, New Zealand, Germany, and the UK have cost-effective and interoperable wireless structures, a high penetration of mobile phones, and a relatively low cost for the SMS messaging service have experienced remarkable success with the SMS application [55]. The success of SMS as a messaging service provides a potentially huge SMS messaging customer base which could lend itself as a SMS mobile marketing customer base, making it an attractive opportunity for marketers [63].

One of the main challenges and opportunities for mobile advertising companies is to understand and respect the personal nature of the usage of mobile phones [63]. There are a few critical points in implementing a successful mobile marketing activity. All support one aspect of the golden rules of direct marketing: The right offer, at the right time, to the right audience.

Far and away the most critical component of a successful mobile marketing activity is asking consumers for permission to distinguish the activity from spam. Spam in wireless networks is a big threat to undermining the value of permission-based marketing, because subscribers pay for their response to mobile marketing activities in the form of SMS/MMS messages. Unsurprisingly, no one wants to pay for the content she did not choose to receive.

For e-mail marketing activities people are accustomed to being asked whether they would like to receive additional offers or news when downloading content from the Web. This opt-in process is even more critical in the wireless world. Each activity should feature a quick and easy opt-out process.

There are wide choices of devices for today's mobile consumer. Consumer tastes are varied and there is always a device to suit virtually every lifestyle, from simple,

small SMS phones to highly sophisticated color PDAs. Input mechanisms can be keyboards, pen-based graffiti devices, or touchpad text keying on mobile phones. Screen sizes and quality vary from small black and white displays to high resolution matrix color displays. While SMS is surging in popularity, more capable devices are picking up steam as well. The delivery of information necessitates technologies capable of optimizing content for a variety of platforms.

A reporting tool for tracking the results of the activities should be in place. Metrics should be viewable at individual user levels. Captured statistics should include aggregate data: Survey results, Total messages sent, Total messages delivered, total opt-ins, Total opt-outs. Via the use of technological capabilities, user data should also be captured, including: Opt-in's, Opt-out's, viral messages sent, delivery confirmation.

Mobile marketing activities should have "The right offer, to the right audience, at the right time". To ensure that all three criteria are met within the mobile marketing activity, users should be able to control all these three criteria. A message offering a "DaVinci Code" movie ticket to someone who has read the book fulfills two of the criteria - but if the message arrives at 4:00 AM on weekend, this activity will probably evoke dislike for the marketing activity in the eye of the consumer.

The most compelling benefit of mobile marketing is the fact that it is highly personalized and direct. The opt-in process should obtain relevant demographic information and maintain a simple, painless end user experience. Nacar, a leading watch producer and retailer in Turkey, uses the SMS sign up process for warranty certification that enables it to collect valuable and reliable customer information via that channel. The company is extending the standard two-year warranty to a five-year warranty upon SMS registration with the serial number of the watch. As a result, it gets to better know the customer and ensure that subsequent mobile offers reach the right audience. Unless the offer - as stated above for Nacar - contains an incentive or reward, people will opt-out and the brand will be tarnished.

As seen in Figure 1.4; there are several combinations to build mobile advertising scenarios and the potential to get better results increases as the scenario is built up. New delivery channels like Viral ("word-of-mouth") marketing, refers to what happens to the marketing messages after they are delivered to the targeted list. Good offers prompt recipients to forward them to friends and colleagues, which in turn build brand awareness or increase sales for content owners.
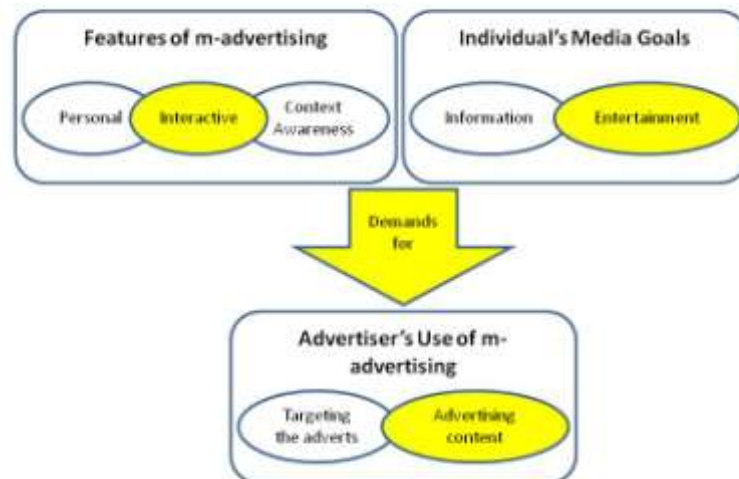
Figure 1.4 M-Advertising Scenarios, Steinbock [37]

Mobile Marketing should be seen as part of the overall Marketing Mix not as a separate channel. The key advantages of Mobile Marketing are that it is:

- Instant and Direct
- Interactive
- Personalized
- Perceived as highly innovative
- Offers 'real time' campaigns
- Can be well targeted
- Can be very cost effective

- Can reach people on the move

- More likely to reach the customer

1.6 Mobile Marketing Context

The mobile marketing context can be basically defined as "any paid form of impersonal presentation and promotion of goods, services, ideas by well-identified promoter" (Kotler et al., 2002) using 'the wireless' as delivery channel [64]. Because each channel has its own advertising and campaign formats and its peculiarities, the mobile platform can make marketing very different from its traditional ways, depending on the objectives of the specific initiative. Figure 1.5 shows possible formats and initiatives of mobile marketing. As described, the "call-to-action" result which activates the consumer is typically the desired output for these activities.
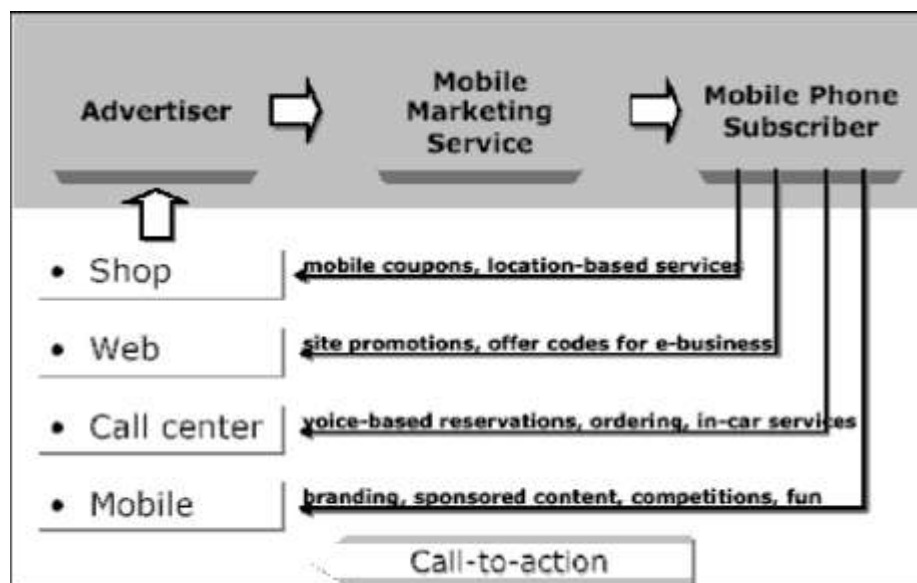
Figure 1.5 Formats and Initiatives, Facchetti-Rangone-Renga-Savoldelli [64]

Other issues affecting the mobile context are the legislation about the privacy and technology. In Western Europe, there is already a law in place governing mobile marketing activities and this law is aimed to be uniform across the continent. On December 19th, 2000, a new "Proposal for a Directive of the European Parliament

and of the Council concerning the processing of personal data and the protection of privacy in the electronic communications sector" was presented by the European Commission that was voted on May 30th, 2002, and accepted by the European Parliament. From the technological point of view, interoperability between different networks, the availability of localization technologies and mobile devices are key points for expansion and to take into consideration.

Figure 1.6 shows how the mobile business and its structure is organized and how it is currently seen and interpreted. Advertisers including their core functions and their roles as players are listed in detail in Figure 1.6. All end-users arrive through these channels and the supply chain is organized accordingly. There is no player or function to fullfil all aspects on its own and the key is to create an ecosystem capable of addressing the needs of the end-user. Principally, the main current limitation is that the system is defined as per traditional mature market's point of view, with well defined and specialised roles.
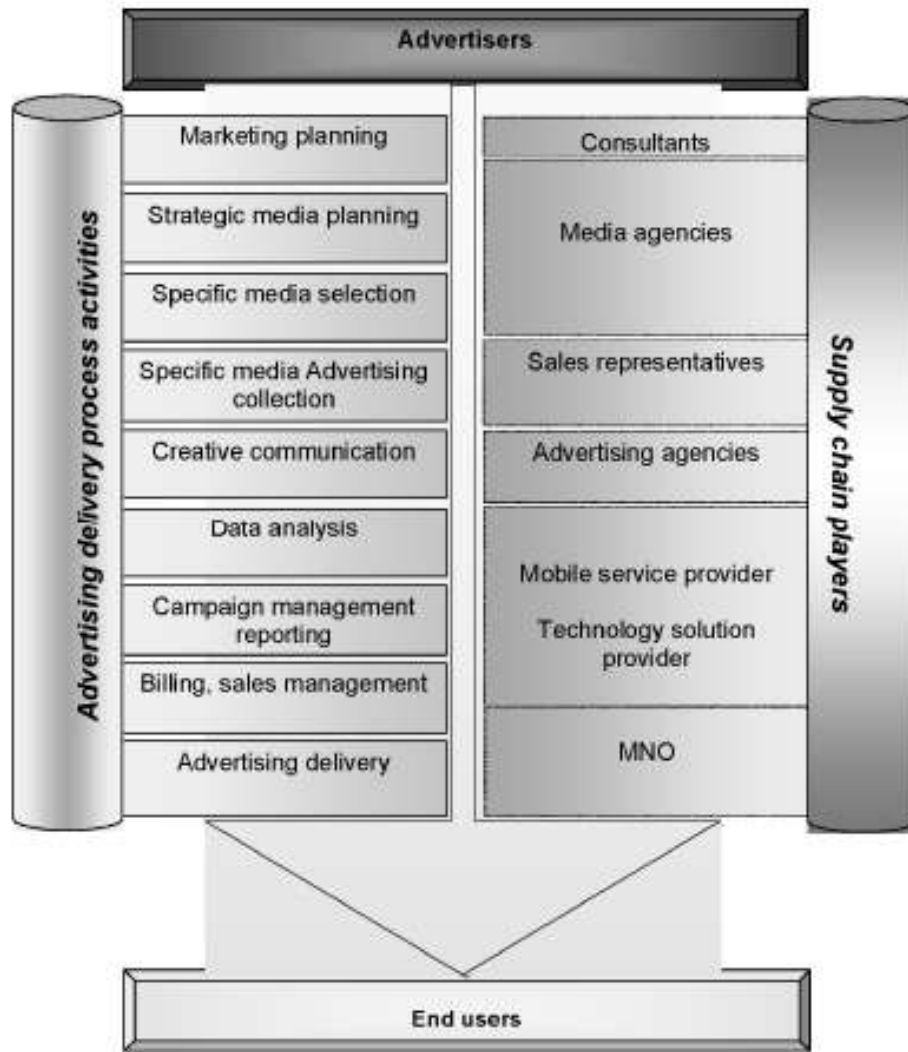
Figure 1.6 Market Structure, Facchetti-Rangone-Renga-Savoldelli [64]

1.6.1   Advertising through Mobile Phones

With the increasing number of media types, it has become more and more difficult for marketing managers to find appropriate strategies to target potential customers with their messages. Initially, it was possible to capture a large segment of the society by placing advertisements on main TV channels. However, after the rise of private channels, the access to consumers through television has become a complicated task. The similar situation can be observed with other mass-media types such as printed media or radio. As a result, getting time and attention from the audience has turned into a major challenge for advertisers. Globalization, technology

and the changing habits of consumers are in a drastic transformation; the need to have communication with "your" customers was never as profound as it currently is.

Mobile advertising is a dimension of mobile marketing and is serving as the advertising channel mainly focused on the advertising side. As described in Figure 1.7 there is phenomenon on the interaction of these functions.

Figure 1.7 Relationship of Mobile Marketing and Mobile Advertising, Komulainen-Mainela-Tähtinen-Ulkuniemi [7]

Different media types require different approaches because of variability in their reach or richness. Reach is a function of how easily customers, or in this case, participants in advertising campaigns, can be contacted through a given medium. Richness, on the other hand, is defined by [63];

- Bandwidth - the amount of information that can be moved from sender to receiver in a given time.

- The degree of individual customization of the information.

- Interactivity - the possibility to communicate bidirectional.

The communication of rich marketing information, that is, information that ranks higher on all three aspects, has traditionally required physical proximity to customers and/or channels specifically dedicated for the delivery of information. Figure 1.8 illustrates the relationship of richness and reach ability. If there is rich content,

personal touch in the form of face-to-face conversation gains importance as compared to reaching a large scale of consumers, where personal messages cannot be delivered.
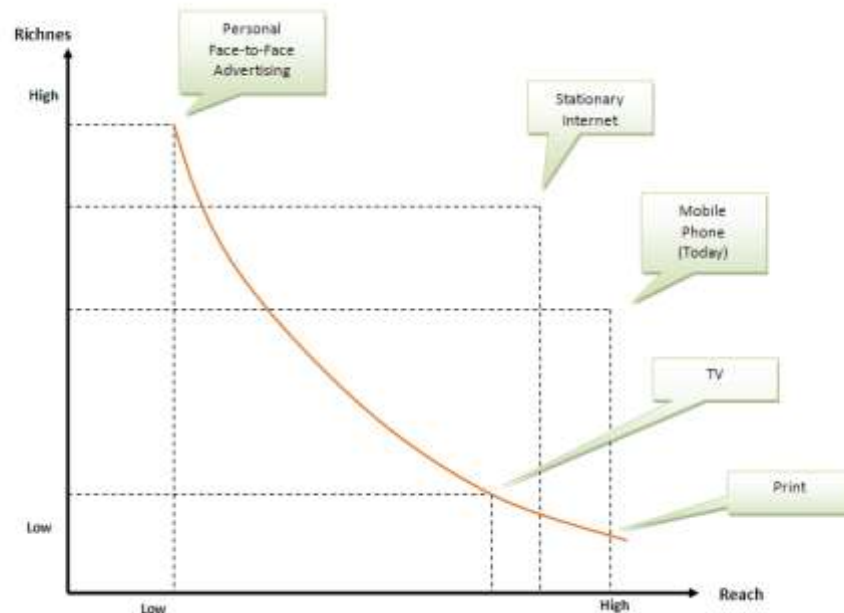
Figure 1.8 The Trade-off, Barnes-Scornavacca [63]

According to a study by Okazaki Shintaro [75], there are two major findings:

First, from the marketers' point of view, it is important and necessary to capture a more accurate portrayal of those users who have a more positive attitude towards wireless advertisement. More specific consumer segments should be sought for effective targeting via mobile devices. Specifically, despite the dominant percentage of young users and their higher acceptance of wireless advertising, wireless advertisers may need to retarget their focus on the educated young elite with higher disposable income, rather than on the general youth market.

Second, the fact that daily e-mail users exhibit a more negative attitude towards wireless advertising and willingness to access it should be considered as an emerging reality. Managerially, text banner ads via mobile device need to be adjusted

according to the realistic needs and wants of well-targeted segments. Otherwise, history may repeat itself: the click-through rate on wireless banners may drastically decrease over time if little effort is made to attract a more specific consumer target. Poor wireless promotion may not only detract from consumer interest, but could also cause considerable waste of valuable resources. Also, it will be a crucial issue for marketers to view wireless promotion as part of integrated marketing communications total media planning, especially through effective media overlapping programs. [75]

1.6.2   Advertising through Text Messaging

SMS advertising is an effective interactive medium that combines the impact of telemarketing, the digitalization of e-mail, and the localization of m-commerce. Its precise targeting makes SMS advertising particularly suitable for time and place sensitive advertising.

Within the same study of Okazaki Shintaro [75] there are some meaningful results; the overall acceptability of SMS advertising was 44%, significantly higher than the acceptability of telemarketing. This more positive attitude could either be the result of the novelty of the medium or an intrinsic aspect of SMS advertising. The authors suggest that it is the latter; the medium is less intrusive than traditional telemarketing, because respondents can choose when and if they read a message, unlike the telephone which produces a summons which evokes a conditioned response. Moreover, unlike traditional direct mail, text messages on mobile phones are available in otherwise 'dead time', e.g. while travelling, when recipients may be looking for entertainment.

The 26 campaigns demonstrated in the study [75] are explaining the effectiveness of text message advertising. Response rates varied from 68% to 3%, with an average of 31%. This compares very favorably both with direct mail, with reported response rates between 1% and 5%, and permission-based e-mail marketing, with reported response rates between 1% and 8%. The average response rate of 31% compares

reasonably well with 63%, for an incentivized scheme where respondents were paid both to take part and per message received. The correlation found in this study between acceptability, relevance and interest supports Godin's argument for permission marketing [57]; moreover, these three dimensions are also related to response. SMS advertising has three different effects: response, branding effect and effect on purchase. Respondents reported considerable effects in all three categories. The branding effect found does not imply that SMS advertising could be used for that effect alone. All these campaigns included some call to action; the authors found a significant correlation between action and brand recall. The nature and direction of the causality is unclear however; it may be that better known brands have a better response, it may be that text messages improve brand recall or it may be that taking action, following a text, reinforces the brand recall. A message used just to support a brand, without a call to action, might not be effective. The regression analysis in the study suggests that perceived relevance is related to change in purchase intention, as predicted by permission marketing theory. Age is also related to change in purchase intention; perhaps because younger people have been the early adopters of text messaging. Text messaging is becoming increasingly popular with older age groups, whose adoption is encouraged by their need to stay in touch with younger relatives and by interactive television programs [73]. As older people become more used to SMS they too may become more responsive to this advertising medium. This research supports the role of text creativity; there was a wide variation in attitudes and responses between the different campaigns.

The recommendation that effective communication should provide clear, targeted and high-value content messages is self evident. The reported increased likelihood to purchase is the most important finding of this research; on average this was 35%, but reached a high of 71% in a particular campaign. These claims may be exaggerated, but they reflect an enthusiastic attitude. To some extent these response rates may be due to novelty: the proliferation of text message advertising and spam are likely to reduce the effectiveness of the medium over time [73].

1.7 Personal Privacy

Overall, personal privacy is a salient and relevant issue to many people. However, consumer attitudes towards marketers' use of their personal information varied widely depending on the situation, the perceived reputation of the company using the information, and the relevance of the products being sold to the subjects' own personal needs and wants. According to a study [73], certain types of people—particularly those who appeared to be leading what might be termed as "comfortable" lifestyles were more concerned about threats to their privacy than others. Privacy is by no means a black-and-white issue; most people do not seem ready to ban all database marketing efforts, but privacy does seem to be an important issue, and continuing media coverage of privacy issues has the potential of sensitizing consumers even more to the issue.

The implication for direct marketers seems to be that it will be crucial for them to become more sensitive to privacy concerns, and to exercise good judgment when conducting database marketing activities. One way for companies to accomplish this is by using database marketing to carefully cultivate their own best customers, rather than to constantly prospect by sending mass mailings to purchased customer lists. Although many direct marketers currently focus much of their attention on getting new customers, privacy concerns, along with the growing environmental movement and rising postage costs, may result in the necessity of reducing vastly the amount of unrequested direct mail that consumers receive. On the other hand, since most people are relatively positive about being approached by companies with whom they already do business, the practice of "relationship marketing" (which involves using individualized customer communication to increase brand loyalty) may well become more popular.

One of the important issues delivered from this study [73] is that a substantial part of the population is to some degree concerned about threats to privacy. The growing media interest in the issue suggests that the next year or two is likely to be a crucial time for direct marketers, and may result either in the public's greater acceptance of

direct marketers' activities, or in increasing outrage leading to forced or voluntary curtailment of the way direct marketers do business. Which way the scales tilt will depend largely on the activities of the direct marketers themselves. Before consumers will become more accepting, they will have to be convinced that the result provides some real benefit to them. However, consumers may be swayed if they feel that marketers are helping them in some way, either by offering them goods and services that they really want or by providing some kind of value added service, such as big coupons or recipes, as a reward for their participation. The key here is for direct marketers to actually provide a clearly perceivable benefit to consumers, rather than to appear to be trying to talk them into products they do not want. If database marketers can actually use new technology to accomplish this, then they look forward to the possibility of a healthy future. However, if they continue the all-too-common current strategy of using undifferentiated mass mailings and protests about their own "rights" to use the information they have gathered, then their prospects for success or even survival are much less clear [73].

1.8   CRM

What promises to set companies apart in today's hyper-competitive markets is an ability to address the preferences and priorities of their customers. From the executive suite to the front lines, customer loyalty has become the key business issue of present times.

As customer infidelity becomes a pressing trend, expect to see significant corporate turmoil and a growing emphasis on strengthening the customer relationship. Once, economies focused on building products and selling them to every potential prospect. Now, economies must focus on building relationships, and providing more products and services to their existing customer base. What drives companies in this direction is this recognition: it is far more profitable to retain existing customers and build relationships with them than it is to try to attract new customers. Investing in current relationships becomes vital to success. But companies also fear intensifying

competition. They realize they must differentiate themselves to hold onto their customers.

Customer Relationship Management (CRM) initiatives tend to be launched to deepen customer relationships and ensure they become more profitable. Success depends on managing customers across front-office functions (Sales, Marketing and Service) and channels (direct sales force, call centers, the Web, retail outlets, resellers, etc.).

Few companies will be able to compete successfully in the fast and unforgiving markets of the future without mastering the management of customer relationships. Indeed, strategic decisions made with regard to customer management will prove more consequential than ever.

1.8.1   Main Components of a CRM System

Mainly a CRM system will consist of one or more of the following components, and is likely to grow over time to include additional components from this list and new components that will emerge as the CRM industry matures;

- Sales functionality; e.g. Contact management profiles and history, account management including activities, order entry, proposal generation.

- Sales management functionality; e.g., pipeline analysis (forecasting, sales cycle analysis, territory alignment and assignment, roll-up and drill-down reporting)

- Telemarketing/telesales functionality; e.g., call list assembly, auto dialing, scripting, order taking.

- Time management functionality; e.g., single user and group calendar/scheduling (this is likely to be Microsoft Outlook), e-mail.

- Customer service and support functionality; e.g., incident assignment/escalation/tracking/reporting, problem management/resolution, order management/promising, warranty/contract management.

- Marketing functionality; e.g., campaign management, opportunity management, web-based encyclopedia, configurator, market segmentation, lead generations/enhancement/tracking.

- Executive information functionality; e.g., extensive and easy-to-use reporting.

- ERP integration functionality; e.g., legacy systems, the web, third-party external information.

- Excellent data synchronization functionality; e.g., mobile synchronization with multiple field devices, enterprise synchronization with multiple databases/application servers.

- E-commerce functionality; e.g., manages procurement through EDI (Electronic Data Interchange) link and web-server, and includes business-to-business as well as business-to-consumer applications.

- Field service support functionality; e.g., work orders, dispatching, and real time information transfer to field personnel via mobile technologies.

Figure 1.9 represents the graphical model of the explained functions above in correlation to the CRM structure and front office integration.
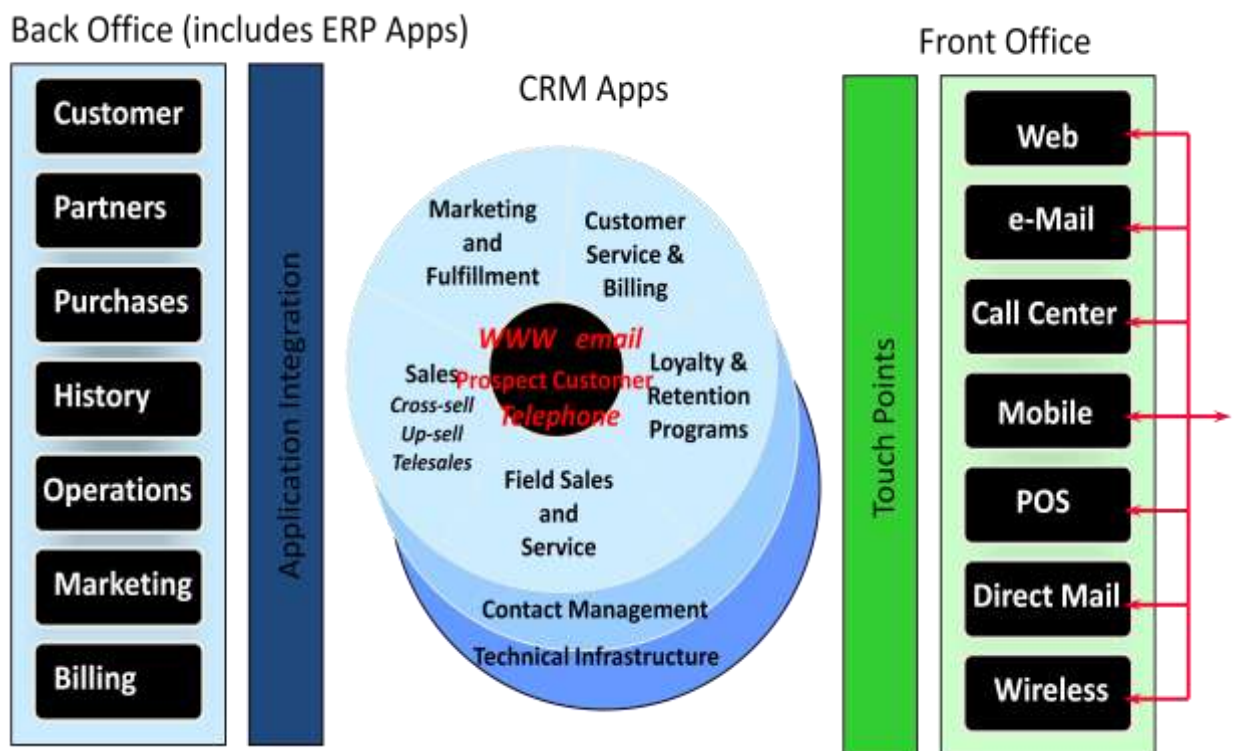
Figure 1.9 Main Components of a CRM system, Kalakota-Robinson [76]

It is important to understand the key benefits of CRM for most companies. These benefits generally fall into three categories: cost savings, revenue enhancement, and strategic impact.

1.8.2 Using CRM as a Tool for Marketing

In recent years, the software world became focused on the idea of providing an integrated platform encompassing Sales, Marketing and Service. From a technological standpoint, CRM was defined by software firms offering front-office systems. Now, the technology scope has shifted once again and everyone is struggling for a voice in the CRM arena. CRM provides access to customer information, their needs and their preferences. The new forms of activity in the CRM arena, however, revolve around customer interaction. These new software and service offerings manage, enable and optimize channels of interaction and commerce. The upside benefits associated with CRM can be tremendous. Among them:

- More effective cross-sell and up-sell;

- Higher customer retention and loyalty;

- Higher customer profitability;

- Dramatically more productive sales efforts;

- Higher responses to marketing campaigns;

- Extraordinary service and support;

- More effective investment of scarce resources.

There is a "more holistic view" in place; technological evolution leads companies to a newer, more holistic view of customer service or customer relationship management. Rather than having point solutions, each responsible for a piece of the information needed for the successful management of their customer relationships, they now look at their customers as assets, and proactively manage those assets.

Thus, the technology aligns well with newer management philosophies, which also focus on managing processes rather than managing departments.

1.8.3   CRM through Database Marketing

The most important output of the integration of database marketing is an enabling of effective customer relationship management. An important implication for practitioners as a result of the increased effectiveness of database marketing is one-to-one marketing. That is, marketers can use their enhanced data capture, accurate and timely information about their customers to understand and satisfy their needs, wants, rather than those of mass market or market segments.

The notion of one-to-one marketing is closely linked to customer relationship management as it relies on the building of relationships with customers to acquire, retain and maximize the value of such relationships.

CRM includes many aspects which relate directly to one another. To get a fully integrated view of the customer it is important to model the CRM system as a whole of two components which are described in Figure 1.11. The Operational CRM component and the Analytical CRM component [76];

- o   Operational CRM; provides support to "front office" business processes, e.g. to sales, marketing and service staff. Interactions with customers are generally stored in customers' contact histories, and staff can retrieve customer information as necessary.

   The contact history provides staff members with immediate access to important information on the customer (products owned, prior support calls etc.), eliminating the need to individually obtain this information directly from the customer.

   Operational CRM processes customer data for a variety of purposes: 'Managing Campaigns', Enterprise Marketing Automation, Sales Force Automation

o Analytical CRM; Analytical CRM analyzes customer data for a variety of purposes: Designing and executing targeted marketing campaigns, Designing and executing campaigns, e.g. customer acquisition, cross-selling, up-selling. Analyzing customer behavior in order to make decisions relating to products and services (e.g. pricing, product development). Management information system (e.g. financial forecasting and customer profitability analysis). Analytical CRM generally makes heavy use of data mining.
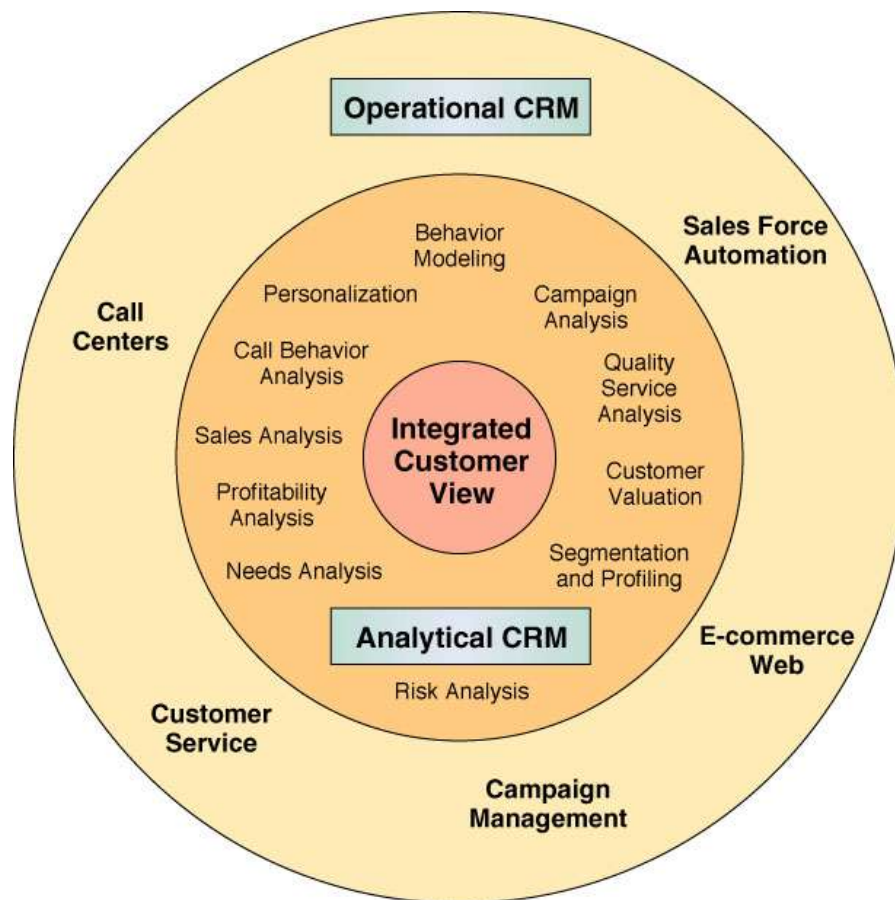
Figure 1.10 Operational CRM vs. Analytical CRM, Kalakota-Robinson [76]

According to a research [77] during the implementation of one-to-one marketing, four steps can be taken:

- The first step involves identifying customers, and organizations must have the technical capability to capture and conduct sophisticated analysis of customer data for one-to-one marketing to be achievable.

- The second step is to differentiate customers through customer data analysis. By differentiating, the organization can capitalize on differing levels of customer value and prioritize its efforts and gain the most advantage with the most valuable customers.

- The third step in implementing one-to-one marketing is to interact with the customer. That is, every conversation and interaction with a customer needs to set up the opportunity for the next. The bottom line is the practice of permission marketing in the web and mobile environment and the delivery of superior value to the customer

- The final step in the implementation of one-to-one marketing is to customize for customers. That is, organization must use the insights gleaned from the above steps to meet a customer's individual needs and be sufficiently responsive and flexible to respond to the differences between customers. The Internet and mobile give customers the capability to influence how they interact with an organization and to customize and personalize the services and offers they receive.

1.8.4 Mobile Customer Management

The mobile phone is essentially a new channel - a channel or medium of communication and a channel of distribution. There are some important issues which companies need to consider as they move to using the mobile phone as an important and possibly dominant channel in customer communication.

Mobile phones offer a new way of achieving an individual or one-to-one relationship with customers and a unique opportunity to get people's attention. The fact that the mobile is a telephone offers the possibility of creating an interactive conversation with customers. For a supplier, one objective of doing this is to exploit the technology to learn from customers' interactions. The mobile also allows many ways of tailoring the dialogue and avoiding what is little more than an unrelated series of sales pitches.

Being constantly in touch, providing and receiving lots of information is especially advantageous for three groups of people. The first are vagrant bosses. Because of the current fashion for companies to contract out everything but their core businesses and hand as much power as possible to front-line workers, bosses now spend much more time establishing relations with potential business partners than telling their employees what to do. Mobile phones make that relationship building easier. The second group of people is the vast army of people who spend their time either on the road or at clients' offices rather than sitting at their desk. The third group of people is obviously consumers [89].

In many sectors, companies need to [89]:

- Get to know their customers, and keep renewing their knowledge of customers.

- Stay in touch with the customers, with timely and relevant communications, ranging from promotions to useful information.

- Identify quickly when customers are not being served well and react.

- Identify the customers' needs - often before customers realize them - and fulfill them quickly.

- Today's average mobile phone was in origin essentially a dumb device, which helped with only some of the above tasks. It was good for allowing people to talk and send text messages, but not very good at managing the information that makes customers lives go round, except where it was being used as a remote PC connection device. The idea, when it comes to customer

management, is to create a single smart wireless device that will allow customers to:

- Check their e-mail.

- Feed data in remotely.

- Use the Internet.

- Plan their schedule, communicate it to others and schedule meetings with others.

- Coordinate their lives with others.

- Locate (or be informed of) the nearest point of service (by receiving messages which use their location as registered on the mobile network).

- Express preferences to suppliers

- Have electronic purse loading and use.

- Use ticketing.

- Use micropayment - make very small payments remotely that are too expensive to make remotely by other means.

- Receive customized sales and service information and alerts from suppliers and content providers.

- Control their household automation.

- Call for help (e.g. breakdown services) and receive acknowledgement of progress with supplying the help.

- Download music or games (e.g. for mobile phones merged with MP3 players or with a game chip merged with mobile phone devices).

There are other possibilities, in other words; customers could have a device that is a pervasive mixture of an electronic organizer, a PC, alarm, remote control and a mobile phone.

New benefits which will be derived from the way the features of wireless technology (which was considered later) are translated into the advantages of [89]:

- Contact ability;

- Acceleration of activity;

- Automated, secure identification;

- Reduction of cost;

- Improvement of the quality of information on which decisions are made.

Some of the most advanced customer relationship management systems already combine transaction processing with the analysis of customer interactions, leading to the optimization of each future interaction via integrated customer touch-points. This is already being achieved by some retailers and direct marketers, who have demonstrated that more personalized customer relationships can help them retain and grow business with existing customers, as well as attract new customers. For many companies, it is service to existing customers that is the key.

Suppliers of various products and services have understood that it is possible to get more value from customers by using customer information in every customer interaction via various customer-facing channels. However, delivering this idea in practice is difficult today, even with relatively restricted channels, many of which have time lags built into them. The most important of these is usually the time it takes the customer to get to the channel to communicate his or her need, whether in a sales or service episode, and get response.

1.9   Permission Marketing

All kinds of businesses are finding ways to make customers' lives easier [66]. With customers' permission, several travel booking agencies, such as Galileo.com, TheTrip.com, Travelocity.com, and some airlines are now using instant messaging to upgrade confirmations and to notify travelers of their flight status, departure gate assignment, and weather conditions in their destination city.

This kind of mobile permission marketing goes far beyond airlines and travel agencies. More than 800,000 people have given permission to two shopping malls outside London to send personal messages and special promotional offers. Customers choose which stores they want to hear from and then notify the service when they visit one of the malls. Messages are sent to their handheld devices only when the customer is in the mall.

Similarly customers of ICA Ahold, the Swedish retail chain, have given the supermarket permission to contact them when they are in the store. Using their WAP-enabled mobile phones, customers can check their account balance, be notified of the store's special offers—including personalized offers—and even pay for their purchases using their mobile.

Another interesting and fast-growing player in the permission marketing game is "The Gator" Corporation. Gator provides free software that automatically fills in online forms and remembers login IDs and passwords. In exchange for this service, users give permission to Gator software to display relevant and high-value pop-up advertising and promotions based on preferences of the individual user. These preferences are based on product or service choices the user made on previous Web visits. Gator is careful to respect consumers' privacy and does not collect individuals' names or any personal information. The service works as follows: If a consumer uses the Web to research information about a product category, for example an SUV, Gator will offer special information about SUVs.

The Internet audience has voted and they prefer Gator to run-of-the-mill advertisers. In a study the author said, "There are several million people out there who have decided that the normal advertisers out there, most of whom use advertising like a spray hose, aren't as useful or interesting as those who sign on to Gator, which uses advertising more like a valuable solution dispensed from an eye dropper"[3]. The few million people the writer mentions actually amount to 20 million unique users. The power of relevant messages sent with permission of the users is demonstrated by click-through rates ranging from 6% to 26% depending on the product category. (For

those not familiar with Web advertising, this compares to a typical 0.5% expected from a typical successful Internet banner campaign.) An October 2001 Greenfield Online survey revealed that 76% of Gator's active users are extremely satisfied or very satisfied with the software. The study also showed that an average user clicks on more than three Gator ads and offers a month. More than half said they saved money from Gator offers [4], with the average savings being $16.73. Gator is one of the first companies to achieve a mass scale of permission marketing and learning relationships using feedback, knowledge and permission to individually customize offers. Gator's enterprise clients include the leading Fortune 500 advertisers in automotive, travel, financial services, entertainment, retail, and consumer packaged goods.

This new form of communication, with the customer giving permission to the company and the company responding with customized personal offers, is changing many of long-accepted marketing beliefs. As customers begin to direct the course of communication, engage in more self-service activities, and offer opinions and advice, they help to determine the marketing tactics of the company—an upside-down value chain revolution.

1.9.1   Definition of Permission for Mobile Phone Users

In order for mobile marketing to reach its full potential of personalized information available anytime, anyplace, and on any device, it is necessary to understand the key characteristics of the mobile medium involved. A mobile marketing application should contemplate the following aspects [63]:

- o Time and Location: Although time and location are two different aspects, they were considered strongly interrelated. An individual's behavior and receptiveness to advertisement is likely to be influenced by his location, time of day, day of week, week of year, etc. Individuals may have a routine that takes them to certain places at certain times, which may be pertinent for mobile marketing. If so, marketers can pinpoint location and attempt to provide content at the right time and point of need, which may, for example,

influence impulse purchases (Kannan, Chang, & Whinston, 2001). Feedback at the point of usage or purchase is also likely to be valuable in building a picture of time-space consumer behavior.

o Information: In particular, data given a context by the user. By itself, data do not contain an intrinsic meaning. It must be manipulated appropriately to become useful. Therefore, information can be defined as the result of data processing, which possesses a meaning for its receiver. Murdick and Munson (1988) point out that quantity of data does not necessarily result in quality of the information. The most important thing is what people and organizations do with the information obtained and its ability of extraction, selection, and presentation of information pertinent to the decision-making process should be considered as a decisive factor.

o Personalization: One of the most important aspects to consider is that wireless users demand packets of hyper personalized information, not scaled-down versions of generic information (Barnes, 2002). The nature of the user, in terms of a plethora of personal characteristics such as age, education, socioeconomic group, cultural background, etc, is likely to be an important influence on how ads are processed. These aspects have already proven to be important influences on Internet use (OECD, 2001), and as indicative evidence has shown above, elements such as user age are proving an important influence on mobile phone usage. The wireless medium has a number of useful means for building customer relationships. Ubiquitous interactivity can give the customer ever more control over what they see, read, and hear. Personalization of content is possible by tracking personal identity and capturing customer data; the ultimate goal is for the user to feel understood and simulating a one-to-one personal relationship. Through relational links of personal preferences, habits, mobile usage, and geographic positioning data, the process of tailoring messages to individual consumers can become practical and cost effective.

1.9.2 Concept of Permission Marketing

Godin and Peppers refer to the traditional way of delivering marketing to customers as "interruption marketing." The authors suggest that instead of interrupting and annoying people with undesired information, companies should develop long-term relationships with customers and create trust through "permission marketing." The concept of permission marketing is based on approaching customers to ask for their permission to receive different types of communication in a personal and intimate way. It is well known among marketers that asking for a customer's permission is better and easier than asking for forgiveness [63]. In the wireless world, there is evidence to suggest that customers do not want to be interrupted—unless they ask to be interrupted [66].

A mobile phone is a more personal environment than a mailbox or an e-mail inbox, and an undesired message has a very negative impact on the consumer [48]. As mobile marketing has a more invasive nature than any other media, much attention must be given to permission issues in order to make the mobile marketing experience pleasant to the users. The information received must be of high value to gain the user's permission. It must produce a win-win situation between user and advertiser.

Permission should be seen as the dynamic boundary produced by the combination of one's personal preferences, that is, personalization, of time, location, and information. The user should be able to indicate when, where, and what information he/she would like to receive. Here are a couple examples of how mobile marketing can help consumers and businesses;

- Someone is getting ready to go to the airport and receives a sponsored message saying that her flight is delayed for 4 hours. Because of this information, instead of spending 4 long and boring hours waiting at an airport lounge, she arranged an enjoyable dinner with her friends.

- Consumer lets her wireless service provider know that she would like to receive offers during weekdays, from 12p.m. to 1 p.m., information about the

menu specials of all Italian restaurants costing less than $20 and within a 1-mile radius of where she is located.

- Assume that this information was not customer relevant or time and location sensitive. Someone is on a business trip, it is 3:30 p.m. and she forgot lunch due to an important meeting. Suddenly, cell phone beeps and she receives an offer of a menu special of an unknown restaurant in her hometown. The value to the recipient of this information is zero; moreover, it is more likely to have a negative impact. Figure 1.11 visualizes the concept of permission on mobile marketing.
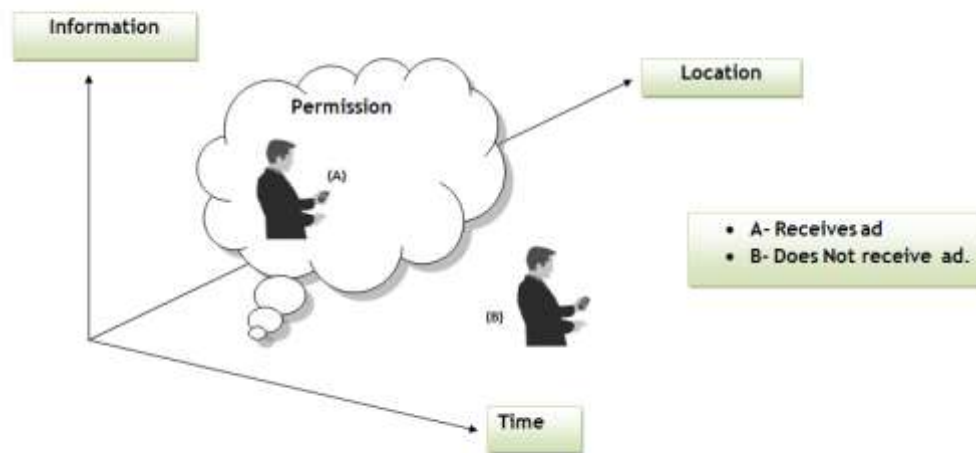
Figure 1.11 Concept of Permission, Barnes-Scornavacca [63]

The idea of a message being sent directly to an individual's phone is not without legislative concerns. Indeed, all over the world, privacy and consumer rights issues lead to the promotion of "opt-in" schemes. In essence, "opt-in" involves the user agreeing to receive marketing before anything is sent, with the opportunity to change preferences or stop messages at any time. Several current initiatives and industry groups, such as the Mobile Data Association, are helping to build standards of best practice for the mobile data industry.

As permission for mobile marketing applications should be dynamic, it is important to be able to identify customer responses to events. Stemming from the technological capabilities of mobile Internet-enabled devices, the measurement of reaction marketing is facilitated. As a consequence, the planning and justification of marketing expenditure becomes more precise. It also will help the identification of which mobile marketing strategies work and which do not. The constant feedback permits marketing strategies to be dynamically adjusted to produce better results for marketers.

Chapter

2   Problem Definition

2.1   Background of Problem

Devices and systems based on mobile technologies have become a commonplace in consumer's everyday lives. Mobile devices have changed the way people communicate and interact. Mobile technologies have a strong impact on modern management. They allow existing activities to be carried out more efficiently and enable many entirely new activities. As a consequence, mobile technologies have the potential to create new markets, alter the competitive landscape of business, and change existing societal and market structures.

Mobile marketing holds strong promises to become the best-targeted advertising medium offering new ways to target messages to users that existing advertising channels (e.g., television, radio, print, and mail) can never do. Mobile marketing will clearly become more relevant in the coming years as analysts' estimates reveal. The size of mobile marketing was expected to grow from US$16 billion to US$23 billion [39–40] by the year 2005, and to US$17.2 billion by 2007 [41]. Europe will lead the mobile marketing market whereas in the USA, the fragmented nature of its cellular markets [42] causes users' fear of mobile spam and the surrounding hype have slowed the market growth [43]. Mobile marketing is growing rapidly in popularity especially in Asia and Europe. According to a study by eMarketer, approximately 40% of mobile phone subscribers have received mobile advertisements (SMS) from marketers in Asia, 36% in Europe and only 8% in the USA [44].

From a marketing perspective, mobile marketing is an extremely under researched phenomenon. For instance, one of the largest professional associations for marketers,

the American Marketing Association [45] does not give any definition for mobile or wireless advertising. The Mobile Marketing Association [46] defines mobile marketing as the use of the mobile medium as a communications and entertainment channel between a brand and an end-user. In basic terms, mobile marketing is the process of planning and execution conception, pricing, promotion, and distribution of products and services through the mobile channel [39].

Despite all the glory and attention paid to mobile marketing, only few academic researchers have evaluated its significance or critical factors determining its success. This is because the mobile marketing market is at birth stage and is turning step by step from basic text messaging (SMS) to more interactive and intelligent communication channels (e.g., MMS). The devices are shifting to the so-called smart phone era. Nowadays, there are different technological standards emerging and various mobile devices in the market operating in different networks (e.g., EGSM 900, GSM1800/1900, EDGE, W-CDMA, and 3G). On this basis, as the devices and networks become more standardized, the mobile marketing application development becomes easier. In addition, researchers in the USA are focusing on the wireless internet-based advertising whereas in Europe, mobile marketing is merely understood as SMS- and MMS-based telecommunication [47–48].

Undoubtedly, mobile technologies have a very powerful impact on modern business. However, mobile devices have also changed the marketers' world. Mobile devices enable interactions between customer and advertiser that become increasingly rapid, easy and are independent from the consumer's location. Users of mobile devices can receive digital photographs, moving video images and high-quality audio from their mobile handsets. Consumers can be provided with information they are interested in, which gives marketers the chance to build customer relationships of a new dimension.

However, still little is known about how mobile technologies and their applications can be successfully integrated into marketing activities. As a result, modern

advertisers are increasingly relying on various modes of interactive technology to advertise and promote their products and services.

In consumer markets, mobile marketing is expected to be a key growth area. The immediacy, interactivity and mobility of wireless devices provide a novel platform for marketing. The personal and ubiquitous nature of devices means that interactivity can be provided anytime and anywhere. However, as experience has shown, it is important to keep the consumer in mind. Mobile marketing permission and acceptance are core issues that marketers have yet to fully explain or resolve. This paper provides guidance in this area. After briefly discussing some background on mobile marketing, the paper analyzes factors affecting mobile marketing activities for Turkey.

2.2   Statement of Problem

Mobile marketing offers great opportunities; marketing activities supported by mobile devices allow companies to directly communicate with their consumers without time or location barriers. But many aspects of mobile marketing still need further investigation. Especially, the topic of mobile marketing is of major interest. Mobile marketing addresses consumers with individualized advertising messages via mobile devices. The underlying paper discusses the relevance of mobile marketing and investigates how permission or allowance from customers can be received and as a result, how the advertising value of mobile marketing can be increased. The analysis is based on a study among consumers.

A sample of 361 mobile phone users from different segments was surveyed. The results indicate that the message content is of greatest relevance and high frequency of messages has a negative impact.

2.3   Purpose of the Study

The purpose of the study is to analyze the factors affecting consumer attitude in permission based mobile marketing. Based on a review of previous studies in the field, the study analyses factors which may affect consumer attitude in permission based mobile marketing.

The factors are expected to help researchers and managers to understand the critical components of mobile marketing better and to provide ideas for further research in this emerging field.

Based on the following research hypotheses, consumers' attitude for permission based mobile marketing is mainly driven by the following factors:

2.3.1   Usability

One of the factors affecting the consumers' attitude for participation in a mobile marketing activity is the Usability factor. This factor is explaining the behavior of the consumers from the usability point of view. The offer in the message should be delivered on the right time at the right place. It should be useful for this consumer segment and the company delivering the offer should not be recognized as "a spammer". Under these conditions, the consumers' attitude to accept the participation may increase.

2.3.2   Acceptance

One of the factors affecting the consumers' attitude for participation in a mobile marketing activity is the Acceptance factor. This factor explains the behavior of the consumers from the acceptance point of view. Consumers' perceived risk to share their information should be "low". Therefore offers in the message should not ask for detailed personal information and the consumers should be able to participate easily.

For example if the consumer is asked only for the declaration of their mobile phone number and their names, they will be more comfortable and it will be much more easy to participate in a mobile marketing activity in comparison with another one that asks for age, gender, location and income.

2.3.3   Remembrance

One of the factors affecting the consumers' attitude for participation in a mobile marketing activity is the Remembrance factor. This factor explains the behavior of the consumers from the Remembrance point of view. The probability for Consumers' to remember any kind of offers made in the past is related to the "differentiation" of the offer itself and the value proposed to the right consumer segment. Even if consumers will not participate in a mobile marketing immediately, the potential to win them as actors of one of the participants later may increase according to this factor. Therefore offers in the message should be designed in a "differentiated" manner and they should propose the right offer to the right audience.

2.3.4   Interaction

One of the factors affecting the consumers' attitude for participation in a mobile marketing activity is the Interaction factor. This factor explains the behavior of the consumers from the Interaction point of view. Consumers' attitude for permission based mobile marketing is may a part of their social behavior which is mainly affected from their environment. Young people who usually sit together and rely on all kind of offers, are part of the youth segment using mobile phones as a life style that may be more inclined towards these kinds of activities. The effect will increase with the presentation of the offer, offers delivered as cartoons or melodies will trigger word of mouth marketing and viral marketing which are main parts of mobile marketing activities.

2.4   Significance of the Study

It is important to explore mobile marketing's challenges and future directions by evaluating factors that seem to influence consumers' attitude for permission based mobile marketing. This study outlines the important drivers of mobile marketing and provides a framework within which the critical elements affecting consumers' willingness to accept advertising can be assessed. An integrated model on acceptance was developed that should be further verified and tested with empirical data.

Mobile marketing will relatively soon turn from infancy to adulthood, thus allowing marketers to build personal one-to-one relationships with mobile phone users via the mobile channel. By succeeding in building personal relationships, mobile marketing holds strong promises to drive sales of numerous products and services. However, this will presumably not happen in the near future since there are many factors such as technological constraints and regulatory issues decelerating the adoption of mobile marketing.

The present literature review was collected from various sources including research reports from consulting and marketing research firms, industrial presentations and publications, newspaper articles, as well as academic studies.

Mobile marketing might be the next big wave after the IT hype at the end of the last decade, forecasts concerning its growth are rather positive and postulate that consumers will be willing to acquire new mobile devices, use new mobile services and thus enter the smart phone era.

The phenomenon under exploration needs different kinds of case studies and surveys to confirm or deny the findings presented and further question the fundamentals of mobile marketing permission. Future studies can test and further develop the presented conceptual model to understand how mobile marketing permission can better respond to its promises.

2.5   Assumptions

There are two sample populations which will be used for comparison, analysis and test of the factors affecting permission based mobile marketing:

The first one is a segment of Turkcell mobile phone users and it describes a population that has already given permission to Turkcell for mobile marketing activities.

The second one is a segment of Turkcell mobile phone users who didn't give permission to Turkcell for mobile marketing activities.

2.6   Limitations

Turkcell was ready to filter the numbers according to permission and non-permission based subscribers. Therefore, the study is limited to Turkcell subscribers. Also there is limit to access to the income and working sector information from Turkcell's point of view. The demographics are limited to age, gender and education.

During the preparation of this data collection, a pilot test was made which invited people to participate to the survey through Internet. The collected data comprised 100 people and did not reflect the target population. As a result, it went on with a non-probable method and used field surveys instead of it. Data collection was made in Kadıköy, Bakırköy, Taksim and Üsküdar which mimic Istanbul's demographical figures mostly according to results before.

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Chapter

3   Literature Review

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3.1   Definition of Important Terms

3G: Third generation, packet-switched digital cellular telephone systems with better spectrum efficiency and bandwidth up to 2 megabits per second for higher rate data services: EDGE (Enhanced Data rates for GSM/Global Evolution), cdma2000, W-CDMA

ARPU: Average Revenue per User is the (monthly) average amount of money received by the mobile operator or service provider from its wireless customers

LBS: Location based services

MMS: Multimedia Messaging Service is an advance over SMS allowing for non-real-time transmission of various kinds of multimedia content like images, audio, video clips, etc.

SIM: (Subscriber Identity Module) card.

SMS (short message service): This is often referred to as "text" or "text messaging." It's the ability to send text-based messages person to person (P2P); from person to application, such as a voting application (P2A); or application to person, as with an acknowledgement or information (A2P).

VAS: Value-Added Service

Mobile marketing: Like Internet or TV advertising initiatives, this is the ability to offer a call to action or brand banner within the mobile application, whether it's mobile Web (WAP), text messaging (SMS), pictures (MMS), or video.

Opt-in: Consumers are in control of their mobile and companies try to engage them in their campaign by offering benefits that will appeal to them. These may include content, information, contests, entertainment, novelties, offers, and so on.

Opt-out: The wireless subscriber takes action to withdraw permission.

3.2   Mobile Marketing as a Channel

Mobile marketing is the new and alternate way to access people, communities and interested groups. The underlying technology is "mobile messaging services" which was first developed as a monitoring tool for GSM operators. Mobile marketing developed later on with these technological capabilities and its usage was broadened to billions of people.

Mobile is now a mainstream marketing element and is "one channel" in a brand's cross-media marketing communications program. It is a means to target a consumer anytime and anywhere via the highly personal mobile device.

Since the mid-1990s, the penetration of mobile phones in developed economies has been explosive. Whereas in 1997, only 215 million people were using mobile communication devices worldwide, by 2001 this figure had grown to a massive 961 million, and further to 1.16 billion by 2003. Today, Western Europe exhibits the highest penetration of mobile phones (79%), followed by North America (48%), and Asia (12%) [56]. However, growth in the European mobile sector has recently slowed. Operators are therefore searching for new services with the potential to stimulate demand.

In this context the short message service (SMS) has exceeded all initial expectations and become a great market success. In 2002, the total number of SMS messages sent globally total was 670 billion and this figure is expected to rise to 2.6 trillion by 2007. In view of this exceptional development, the advertisement industry is

becoming increasingly interested in using the mobile phone as a medium for communicating commercial content [56].

Leading international brand manufacturers - such as BMW, McDonald's and Nike - have already launched campaigns using the mobile phone as a means of conveying commercial content to customers. International market research institutes also consider mobile marketing as a highly promising marketing instrument that will continue to gain importance [56].

A study conducted by HPI Research on behalf of Nokia [49] found that the core mobile phone subscriber market (16–45 year olds) is not only receptive to experiencing mobile marketing, but also actively welcomes mobile marketing in the form of electronic coupons for brick-and-mortar stores, especially if the user will be rewarded back. Over 3,300 people were interviewed in 11 key global markets including USA, Europe, Asia, and South America in June 2001. The study found that 88% of the respondents were receptive to mobile marketing (in the study defined as electronic coupons for brick-and-mortar stores) and approximately 30% stated that they would welcome mobile marketing. The study further identified four key factors contributing to mobile marketing's acceptance [49]. These were:

- Choice (mobile marketing should allow users to decide whether or not to receive messages)

- Control (users could bypass sales messages easily)

- Customization (users should be able to filter the messages received)

- Mutual benefit (users want to get something back).

Similarly, a study by the Chaners In-Stat Group [50] suggests that immediate and recognizable benefits such as discounts or special offers convince people to consider wireless advertisements. The study also argued that mobile marketing should be opt-in.

These forecasts refer to a concept of mobile marketing that is based on obtaining permission from the message recipient [55]. The concept of "permission marketing" addresses the widespread problem of spam in new media communication by demanding the explicit agreement of the addressee to receive marketing information. This approach thus recognizes that the majority of anonymous mass advertising is despised by consumers leading them to reject the messages [57].

The systematic adaptation of marketing impulses to individual consumer profiles is another fundamental building block of permission marketing. If thoroughly personalized, commercial messages may become perceived as valuable information services as opposed to bothersome "interrupt marketing" [6]. Such customization helps to reduce the likelihood of a negative reaction [56].

The high global penetration of mobile communication devices is only one indicator of the high potential of mobile marketing. Moreover, the specific characteristics of the mobile phone allow for marketing measures not realizable by the use of other media. A mobile phone is rarely used by any other person than its owner. It is thus always attributable to one single person allowing for highly personalized marketing measures. In addition, most users maintain a very personal relationship with their mobile phone, regarding it almost as intimate accessory.

Teenage users especially like to express their individuality by personalizing their mobile phone - choosing a particular brand, color, size, and display logo and ring tone. They continuously carry their mobile phone within reach and regard it as status symbol and an important part of their daily lives. For adults the mobile phone has likewise grown to become a highly personal utensil. They also individualize their mobile phone by saving contacts, messages and important dates. Furthermore the SIM (Subscriber Identity Module) card allows for the exact identification of each mobile phone and its user. The mobile phone therefore appears to be the ideal medium for direct and personalized customer communication. Using the mobile medium for communication also enables the advertiser to contact potential customers

anytime and anywhere. Mobile phone users typically have their device with them at all times and may leave it on standby for an average of 14 hours a day [56].

An additional aspect of the mobile phone that lends itself to effective mobile marketing is interactivity. The mobile phone is a highly interactive medium that enables the recipient of a message to reply to it immediately. Interactive media exhibit a bi-directional mode of communication enabling the recipient to affect the communication process actively. As such, the mobile phone exhibits all characteristics necessary to establish a direct dialogue between the advertiser and the potential customer.

Geo-location technologies such as the Global Positioning System (GPS) or Cell of Origin (COO) enable operators to localize the user and to adapt the marketing impulse to his/her current position [6]. By utilizing these technologies consumers can be informed about new product offers at the point-of-sale thereby inducing them to engage in impulse purchases. Currently, however, these kinds of push-services have barely been realized due to poorly developed positioning technologies. More widely spread are location-based pull-services, the use of which necessitates active demand from the customer. In this model, the user provides the service operator with information about his/her current position; subsequently, the user receives offers of close-by product and service providers (e.g., grocery stores, gas stations, or ATMs). The development of positioning technologies has led many experts to forecast a promising future for mobile commerce applications; location based services (LBS) are predicted to become the "killer application" of mobile commerce [58]. By adapting a service that takes into consideration the position of the user, the provider is able to perform a pre-selection of services that would normally need to be done by the customer himself. It thus becomes easier for the customer to pick the best service, and, as a result, his/her satisfaction and willingness to pay rises [59].

The attributes inherent to mobile marketing -i.e., personalization, ubiquity, interactivity and localization - generate significant potential for this innovative form of commercial communication. It is ideal for individualized and dialogue-oriented

communication and is thus superior to measures of mass communication, which in present day markets are hardly ever noticed. In addition, the mobile phone lends itself to enlarging a campaign's reach through viral effects. A viral effect develops if recipients of advertising messages forward these to further recipients who do not belong to the initial target group of the campaign [56]. The advertising message received from a familiar sender can also be expected to have a greater effect on the receiver than a message directly from the advertiser. It has been proven that messages from neutral senders are perceived as more trustworthy than those coming from a self-interested sender [60]. Through viral effects, it is not only possible to enlarge the reach of mobile marketing campaigns, but also their effectiveness.

According to a consumer study conducted jointly by InterQuest and the Mobile Marketing Association, 43% of European consumers regard mobile marketing as positive and effective whereas only 7% rate it negative. The study was based on mobile marketing campaigns of 10,000 to 30,000 test users aged 16–26 in the UK, Italy, and Germany in 2002 [51]. An interesting discovery was that mobile advertisements were in general remembered well. In a mobile marketing campaign, close to 80% of the test users reported remembering the m-advertisement after 15 days. Furthermore, roughly 70% was likely to recommend mobile marketing services to other people. The study was based on 705 test users' opinions gathered via an SMS survey. All test users had agreed to receive m-advertisements from wireless advertisers [51]. However, certain limitations must be taken into account in interpreting these findings such as the novelty of the medium that certainly had a positive impact on memorization.

An extensive survey of SMS advertising in the UK reveals that SMS advertising is considered as acceptable as TV and radio advertising if it is delivered by a trusted source. Consumers are willing to receive several SMS campaigns per week, but they fear that spamming might occur. Thus, they prefer to give their permission only to organizations they trust. The study was conducted in two sequences. The first part included a telephone survey of 1,000 adults with mobile phones before they were exposed to SMS campaigns. The second part comprised of 4,000 interviews with mobile users after they had seen the SMS campaign [48]. In sum, mobile marketing

industry players and consumers have been afraid of the 'spam' phenomenon deriving from negative e-mail spamming experiences. The personal nature of the mobile phone makes spamming especially invasive compared to spam received via other channels and devices [52]. Therefore, the question on how to block spamming becomes of primary importance to the industry.

The performance features presented above substantiate the great potential of mobile marketing as a new instrument of commercial communication. However, the success of a new marketing instrument is related largely on its acceptance by consumers. In this research it was attempted to provide some insight to this important area. In the next section, a "Model proposition" for permission based mobile marketing in Turkey was proposed, along with a number of associated hypotheses. The model is then tested in section 3, which describes the methodology and research findings. Finally, it went on with a summary, conclusions and implications for research and practice.

3.3 Marketing and the Mobile Value Chain

During the early 1980s, national telecom monopolies still dominated the industry value chains. Today, the value chain is dominated by mobile vendors and operators, IT enablers, and, more recently by content providers. A vital community of marketing services providers supports the delivery of mobile marketing campaigns with specialist services. In the early stages, some of these providers focus on technology development, others on marketing services; over time, the players will consolidate. For now, the key players comprise marketers, marketing agencies, mobile specialists and operators (Figure 3.1).

Figure 3.1 The role of Mobile Marketing, Steinbock [61]

3.3.1 Marketers

To marketers, mobile marketing is an evolving medium, which presents great opportunities in customer relationships, via extraordinary reach, highly targeted campaigns and depth in customer intimacy. Mobile channels pose substantial challenges, including business and legal risks (privacy, spam), but potential rewards outweigh perceived risks. The long-term prospect of translating mobile campaigns into point-of-sale instruments provides a powerful incentive even to skeptics.

3.3.2 Marketing Agencies

Despite their slow entry into the business, traditional agencies have steadily increased investments in mobile campaigns across Europe, cooperating with other players in the emerging value chain. Providing expert services in marketing communications, marketing agencies develop broad media and marketing service plans, which now include mobile communication.

3.3.3 Mobile Marketing Service Providers

These service providers specialize in mobile marketing. For now, they have conducted most mobile campaigns, individually or in cooperation with marketing agencies. Mobile specialists support agencies' creative ideas with appropriate mobile approaches. Marketing agencies have used a variety of contractual agreements to cooperate with service providers, while diversifying risk.

3.3.4 Operators

In the emerging mobile marketing value chain, operators market their own services in consumer and business markets. They also offer network access for mobile campaigns, which is seen as an opportunity to raise average revenues per user (ARPU).

In addition to these basic business models, other efforts reflect increasing specialization in demographics (youth markets), sectors (media), research and databases. A distinction has also been made between pure mobile agencies (small creative interactive agencies behind the early campaigns), full-service agencies (managing the full mobile marketing value chain, including technology and client-service teams), and access providers (which offer direct connections to operators). In the long run, consolidation will turn mobile marketing services into the functions of a few leading marketing agencies and many niche players.

3.4 Mobile Marketing Services

In the mobile space, marketing services are dependent on the current stage of technology development and service innovation; in practice, simple voice and SMS capabilities. Over time, mobile marketing shall deploy new mobile services; the extension of the following capabilities will directly influence the effectiveness [37];

- Rich voice: marketing using voice communications, including simple or rich voice, and videophones;

- The internet: marketing using mobile internet, intranet/extranet access, in relation to mobile portals, banners, interstitials and the like;

- Messaging: marketing deploying location-based services, people communications, such as SMS, MMS;

- Content: marketing relying on information, transaction, and databases.

The table shows potential services and their characteristics;

Service	Characteristics	Notes
Content Information Transactions Databases	Trend toward 'TV-style' marketing ↑	Higher forms of content-driven mobile marketing require high-speed networks and devices, as well as sophisticated mobile marketing
Internet Internet	Footnote link (linked ad)–Competitions, special offers, etc Interstitials Search listing (brand presented among top results) Portal listing (brand listed in operator menu) Downloading (ringtone, icon, game) after SMS invitation	Limited space; linking is critical Perceived as spam-like irritation; graphics may slow mobile use Niche use, limited space Recognizability, visibility Cost factor; requires user sophistication; early phase success in youth markets
Messaging MMS	Most SMS formats may be used for MMS	Rich format; higher costs (will decline over time); requires critical mass for network effects (viral marketing)
LBS	User receives SMS or MMS message based on location	Emerging technology; privacy issues; cross-national differences; requires prior opt-in by users; may cause user backlash
SMS *(push)*	Sending SMS to targeted users	Typical to promotions; requires rewards for users to react; perceived as spam; regulation pressures
(pull/push)	Requires user opt-in (users text to a number to receive alerts)	Alerts on promotions, headline news, etc; content costs, perceived value for users; permissions-based database for other campaigns
(pull)	After promotion on other media (radio, TV, press, internet, etc) SMS used as a response venue Competition formats ('text to win')	Response rates high (but typical to early adoption phases); integration potential with other media/channels
(pull)	User sends SMS to a number to request a call back Call back	Feedback method for traditional media advertising (magazines, TV, outdoors); on internet callback options have proved useful
Voice Voice guidance	User responds to a campaign or TV show and phones to a number for voice registration/competition User follows guidelines (responds to a number to receive a code or to leave a message)	Common to TV shows and competitions; free/premium calls and length of number rental to be considered Premium charges; efforts to prolong user calls; regulation pressures

Table 3.3-1 Characteristics of Services, Steinbock [37]

Both SMS and MMS are in early days of diffusion and at the moment the supply side, i.e. the hardware, software, cost etc. have a significant influence on the adoption and diffusion process. While it could be suggested that cultural factors could potentially influence the adoption and use of SMS and MMS, more research would need to be done on SMS and MMS use, to assess how important 'culture' is as an influencing factor. Findings according to Gilligan and Henizmann [67] based on Swiss TV and radio, provides more examples of how language as a cultural factor could potentially influence adoption and use of these Information and Communication Technologies. [67]

Drawing on diffusion of technologies studies, a more general model could be applied and that is that new technologies are 'pushed' by industry and the most important factors are the supply side factors such as cost, availability of the device etc. But once technology starts to reach more mass diffusion, i.e. 'late majority' stage of the diffusion process, there is more of a focus on users and how users experience new technologies and this leads us on to explore other issues such as potential cultural factors. Perhaps economic factors are, in fact, more evident in the early phases of diffusion of a new technology. Cultural factors may be influential at this stage, yet they may be concealed by the supply side factors and hence be very difficult to identify. As a result, it may only be in the later phases of the diffusion process where it was seen more clearly how culture could potentially influence adoption and use of new technologies.

However, there are the exceptions. Some technologies are driven by users' demand and shaped by factors, other than economic ones. In such cases, 'cultural' factors may play a greater role in the early phases of adoption. An example is the adoption of telephone in the USA by farmers [90]. Surprisingly, farmers, by and large due to their own initiative, adopted the telephone at rates surpassing those of city-dwellers. In 1904, after Bell's patents had expired, the farmers set up their own independent exchange service and rural groups organized small farmer lines and mutual systems. By 1907, there were 18,000 such operations, comprising of 1.5 million rural

telephones. In effect, the farmers developed a telephone service for themselves and farm families recognized their own practical and social uses of the phone.

The study has indicated possible culture influences, both to measure them and demonstrate. It was not clear, to exactly what extent culture could be regarded as an influencing factor.

3.4.1   The New "3G" Marketing

With mobile devices, it can be done all kinds of things — checking flight schedules, transferring money from one account to another, paying credit card bills, making a hotel reservation, checking the investment portfolio, taking and sending pictures, watching videos, checking the score of a football game, checking the weather in different locations. With the new 3G devices it can be done even more, and faster.

The mobile marketplace is significant. There are over 2 billion people out there with a mobile device capable of voice, text, image, and Internet communication. Mobile marketing is a marketer's dream. It allows direct, personal communication in real time with the opportunity for immediate, direct response. Mobile marketing can be used to:

- o   Improve customer loyalty,

- o   Increase brand awareness,

- o   Build a customer profile in a permission-based opt-in database,

- o   Send potential customers to bricks-and-mortar locations

- o   Increase sales.

There are a number of mobile marketing opportunities—instant messaging, location-based services, profile-specific advertising, subscribed content, SMS (short messaging service), MMS (multimedia messaging service), and mobile blogging.

3.4.2   Instant Messaging

Wireless providers are including instant messaging as part of their services. The second annual AOL Instant Messaging Survey showed that a whopping 59% of Internet user's use instant messaging on a regular basis, 29% send more instant messages than e-mail, and 20% of instant messaging users send mobile instant messages or SMS text messages through a mobile personal device [68]. The survey provided stats to indicate that it's not just teenagers getting in on this phenomenon— instant messaging is being used by 90% of online 13- to 21-year-olds, 71% of 22- to 34-year-olds, 55% of 34- to 54-year-olds, and an amazing 48% of those over 55.

3.4.3   Location-Based Services

As the name suggests, location-based services use location as a key element in providing relevant information to users. There are many mobile marketing applications for location-based services. Someone is hosting a meeting in another city and wants to find the closest Staples shop to e-mail the print job to. The flight has been cancelled and she wants to find the closest hotel. It is her anniversary and she have to find the flower shop closest to your home. Someone is in a strange city and wants to find the closest Thai restaurant with directions on how to get from where she is to there with detailed instructions. With the convergence of so many technologies, she can even have her mobile device talk to her to tell her how to get there. Technology is being developed to be able to identify the specific geographic location, within 5 to 10 yards, of the telephone. This enables the opportunity to send highly targeted location-based advertising to the device. This opens up a whole new range of opportunities for marketers.

Marketers have been hearing for years about the scenario where she will be walking by Starbucks when her cell phone will vibrate. When she review her mobile device screen, she will see that there's a two-for-one special for Starbucks that has been sent to her. Another technology is the bar code reader attachment for the telephone. Every item for sale in the world has a bar code. Someone will be able to scan an item and,

using her mobile device, go to the Internet to find where the best deal is on that particular item within whatever radius she defines.

In conjunction with LBS to design profile-specific advertisings will return on a better manner – each phone has a unique identifier in the phone number, it is possible to build the profile of the owner of each device. Once she have a profile, it is then possible to send much targeted advertising messages to that profile. This type of advertising needs to be carefully deployed to ensure that it is not considered intrusive, spam, or unsolicited.

3.4.4 Subscribed Content

Marketers look for permission-based mobile marketing opportunities. In April, Teen People announced that it will send weekly updates and breaking news along with targeted advertisements and promotions to subscribers' mobile phones.

3.4.5 SMS (Short Messaging Service)

SMS allows text messages of up to 160 alpha-numeric characters (no images or graphics) to be sent and received on her mobile phone. The message can also be sent to her mobile phone from the Internet using an SMS gateway Web site. If the phone is turned off or is out of range, the message is stored on the network and is delivered the next time she power on.

A recent e-Marketer study reports that 39% of mobile users in Asia have received SMS messages from advertisers, 36% in Europe, and only 8% in the United States [68]. Early campaigns have mainly been contest-oriented—text to win or tied in with major events. Coke ran an SMS campaign in China which it deemed to be successful. The ad campaign ran for a little over a month. Participants had to guess the highest daily temperature in Beijing and enter the contest via an SMS. Coke said that more than 4 million messages were exchanged in the 35-day duration of the "Coke Cool

Summer" interactive contest. The SMS contest was promoted through a television ad offering free downloads of the Coke jingle and McDonald's coupons. The campaign was user-initiated and was not intrusive.

People saw the SMS voting for their favorite "American Idol" television program. It was very interesting to see that over one-third of the voters were first-time SMS users; this was their introduction to SMS. There are all kinds of SMS promotions kicking in [68].

3.4.6 MMS (Multimedia Messaging Service)

MMS is an enhanced transmission service enabling color images, video clips, text, and sound files to be sent and received by cell phones. The 3G phones are all equipped with MMS capability.

MMS brings a whole new dimension to mobile marketing by enabling color pictures, audio, and video into the marketing message. The marketing opportunities are endless for this technology. The benefits for marketers abound—immediate contact, immediate response, and multimedia capability engaging a number of the senses. Combine this with the ability to know where your subscriber is physically within 5 to 10 yards as well as having a profile of the subscriber—a marketer's dream.

Some examples of the ways in which MMS is already being used:

- Film news—Subscribers receive the up-to-the-second news on what's going on in Hollywood and the latest film news.

- Voting—Subscribers can vote for all kinds of things: their American Idol, who should receive the Best Leading Lady award, which of your new logos they like the best. Voting can be simple ("what's your favorite color?") or advanced with multiple-choice and open-ended questions

- Games—Subscribers could have to take a quiz to answer questions about your company, your products or services, your history, your features, your benefits, anything you want.

- Contest entry—Subscribers can enter to win your contest.

- Instant win—Subscribers can find out if they are a winner immediately.

- Coupons—Subscribers can receive coupons via MMS. They appear on the screen with the expiry time. Show the coupon for the deal. This will drive people to your business. This can be coupled with location-based services.

3.4.7   MBlogging or Mobile Blogging

MMS color picture, text, video, and audio can be instantly added to a blog in a matter of seconds. Football fans can post their pictures of the game and write details of what's happening as it is happening. Imagine this - you are the owner of a restaurant and there is an important restaurant blog that you'd like to get some profile on. You invite the owner of the blog to your restaurant and within seconds through mblogging, pictures of your restaurant can be incorporated into the blog; audio of the blog owner's interview with you can be incorporated as well as a great video of your facilities.

Marketers are in the infancy stages of mobile marketing, and this can take one of two twists. On the one hand, mobile marketing may be treated with respect for privacy and everything will be permission-based with the device owners subscribing to the services they are interested in, providing their priorities and preferences (how often they want to receive information, when they want to receive it, where they want to receive it), and mobile marketing will be a good thing, much appreciated by the consumer. On the other hand, things could spiral out of control very quickly with unsolicited messages and constant advertising popping up, interrupting consumer's calls and use of the mobile device by people trying to sell products she do not need, do not want, and didn't ask for. [68]

3.5 Research Problem

Is it possible to define the common characteristics of the factors which will maximize the attitude of people to give permission and to participate in mobile marketing activities?

3.5.1 Hypotheses

H_1: There is no difference in USABILITY with respect to PBMM attitude

H_2: There is no difference in ACCEPTANCE with respect to PBMM attitude

H_3: There is no difference in REMEMBRANCE with respect to PBMM attitude

H_4: There is no difference in INTERACTION with respect to PBMM attitude

3.5.2 Graphical Model
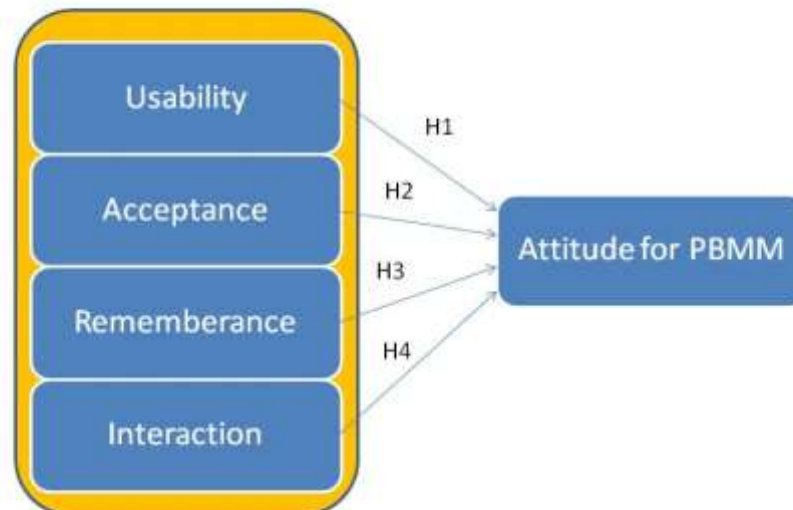
Figure 3.2 Graphical model

Chapter

4 Methodology and Data collection

4.1 Practical Research Methodology

This chapter provides a presentation on how the study was conducted and how the choice of research method was made. Details about hypothesis construction, collection of empirical data as well as criticism towards primary data and methodology is given.

4.2 Choice of Research Method

When gathering empirical data for a study, two different methods can be used for this specific purpose. These are the quantitative and the qualitative methods.

The quantitative research method is in most of the cases related to the deductive approach and positivistic epistemology. The aim of a quantitative research method is to gather a large amount of empirical data to be able to describe specific phenomena and thanks to the large sample draw general conclusions. When conducting quantitative research, surveys are often used. The questions are often very precise and do not give room for deeper answers. The researcher has to find a sample of respondents who will best fit the study in focus. When performing a quantitative study the researcher is objective and his/her own preconception should not affect the gathered empirical data.

The qualitative research method is in the majority of cases related to inductive approaches. Through this method a researcher is gathering the empirical data generally from few respondents. One of the common ways of gathering empirical data trough qualitative methodology is through different types of interviews. By using interviews the researcher can ask more detailed questions and receive deeper answers. The researcher can also adjust the follow up questions to the answer he/she receives. Through interviews, the researcher has also a possibility to interpret the respondent in focus and get a deeper understanding of the respondent's view of the specific problem. When using the qualitative method, the researcher often puts a large amount of effort in interpreting the empirical material. When performing this task, the researcher is subjective and his/her preconception affects how the data is interpreted.

The purpose of this study is to create a picture of the attitudes towards mobile marketing and how customer's attitudes are affected based on different factors. To get a reliable result, it is of great importance to collect a larger amount of data. Therefore, the quantitative method fits the purpose of this study the best. Conducting a survey where the answer alternatives are limited enables the collection of a large amount of empirical data and transfers it into numbers. Thanks to this, all the respondent's answers can be put together and a general picture of how the attitudes are towards mobile marketing can be drawn.

The research design chosen for the study is conclusive (cross sectional descriptive design). A survey instrument was developed based on previous studies done on consumer perceptions of mobile marketing and advertising.

4.3 Survey

To gather empirical data using a quantitative method, a questionnaire was used. The main reason for this was to collect a large amount of data and the lack of resources to conduct more than minimum size of the sample required. Therefore a questionnaire

was viewed as the best choice for this study. It takes less time to gather empirical data and when using a questionnaire and there will not be any variations in the questions.

4.4   Population

When conducting a study of this character, it is of great importance to limit the study to a target population for the study. A target population is the population that the researcher identifies as the most suitable for his/her study. It can though often be hard to find a population that fits the target population. In the case under consideration, the population of Turkcell GSM subscribers has been identified as the target population.

To get a result that reflects the attitudes towards mobile marketing in Turkey, the best way would be to collect questionnaires from different profiles within Istanbul - Turkey. Therefore, primary data has been collected from five different parts of Istanbul (Taksim, Bakırköy, Kadıköy, Beşiktaş and Üsküdar) and the secondary data has been selected from the primary data based on the mobile phone numbers. According to Turkish telecommunication standards, the first three digits define the subscriber's GSM Company. Making use of this, Turkcell GSM subscribers are selected from the collected data as sample of respondents. Later on, the collected data was grouped into permission based and non-permission based GSM subscribers based on Turkcell data. Finally, these two samples were compared based on the proposed model.

4.5   Sample

It is certain that a sample of 361 respondents is enough to fulfill the purpose of this study. Because the target population can be thought as infinite and there was a binary response variable attitude which has a value yes in proportion 1/6 of population. Hence, the minimum sample size can be calculated as,

$$n = \frac{z^2 pq}{\delta^2}$$

Where z value is 1.96 because of normal distribution assumption at 0.95 confidence level, p is 1/6 and q is 5/6, and the error rate (δ) is 0.05. The result, about 214, is the minimum acceptable size of sampling and that makes the chosen sampling size, exactly 361, suitable.

Although an equal share of male and female respondents is aimed in the study, homogenized age distribution and educational balance which will mostly reflect the population, it is not always possible to compose it. Some frequency differences might occur because of both heterogeneity in population and sampling errors.

Choosing a sample from a target population can be done with two different methods. These are probability sampling and non-probability sampling. In probability sampling the chance for every case in the target population to be chosen is the same and known by the researcher. In non-probability sampling, some of the cases have bigger chances for selection for the sample then others. Both these methods can be used in several different ways.

In this study a non-probability sampling technique called convenience sampling was used. When performing a convenience sampling, the researcher selects respondents that match his/her target sample and who are easiest to get hold on until he has reached the necessary size of samples. First data was collected with field surveys from 5 main parts of Istanbul: Taksim, Kadıköy, Bakırköy, Beşiktaş and Usküdar. Afterwards samples were selected within this data from the Turkcell GSM subscriber base. The only criterion was to have respondents that were a part of the Turkcell GSM subscriber base.

4.6   The Questionnaire

At the beginning and during the pilot study, a web site was built for the questionnaire and people were invited via e-mail and SMS to participate in this study. After the first analysis, the collected data did not conform to the needs of the study. Therefore, further data was collected with the same questionnaire through field surveys.

The survey was distributed until up to 500 cases were collected, to be able to select cases as minimum required size of them in the Turkcell GSM subscriber base.

A problem arises when having direct contact with the target sample, since such manner can affect them and how they answer the survey. Therefore, it was aimed to be very objective regarding the subject of mobile marketing and the researcher's thoughts about it were not mentioned when explaining the purpose of the study. By being objective and having the survey designed and written in an easy understandable language, it was hoped for the respondents' individual response and not asking anyone to explain different questions stated in the survey.

4.7   Construction of the Questions

When designing a survey, it is of great importance to put a lot of emphasis on which questions to include how to construct them. When distributing a questionnaire it will be hard to do follow up questions on respondents if the researcher has realized that he/she has missed putting in other questions necessary for the study. The researcher must therefore construct the questions and evaluate them to see if they will provide the answers needed for the study in focus. By constructing very specific questions it will also be easier to evaluate them. When the questionnaire was constructed, special care was given to the purpose of the study, the language and the length of the questions. First of all, it was aimed to construct questions that will confirm or decline the aforementioned hypotheses. The language was simple, to enable respondents who are not familiar with mobile marketing to understand the questions. The questions

were also constructed in a way where only one specific thing was asked in one question. Longer and more complicated questions asking for more than one thing have been divided up into a main question followed by more specific questions. By dividing questions this way, a clearer picture was arrived at what the respondent thinks about the subject in focus.

4.8   Answering Alternatives

When designing a survey, the researcher can choose which type of answering alternatives he/she wants to offer the respondents. One of the alternatives is to use open-ended questions through which the respondent is given the opportunity to answer freely with his/her own words without being limited to specific answers. Another alternative is to use close-ended questions through which the respondent is given different answer alternatives which he is restricted to. In the survey, only close-ended questions were used since it will was very time consuming to go through 500 surveys with customized answers. Many of the questions deal with the respondents' attitudes based on a scale of one to five where one is very negative and five is very positive (Likert Scale). Other questions are designed by offering the customer four to five different alternatives to choose from as the answer. To gain as high a response rate as possible, these questions come in alternatives that respondents can choose. By using close-ended questions, construction of answers based on the theoretical framework, was also made easier.

The risk that the respondent may feel that he is not given the possibility to express his exact thoughts on the subject in focus which in turn may possibly affect his interest in completing the survey, is known to the researcher.

4.9   Testing the Questionnaire

Before distributing the survey to the target sample, the researcher should conduct a pilot study of the survey. With this aim, a pre-pilot study was done and 50

respondents from our colleges and students living around us were contacted to hear their opinions. This enabled an evaluation of the survey from a different perspective and whether respondents interpreted the questions in the right manner. After finalization of the survey, a web site was prepared for the pilot study with the said questionnaire and more than 100 people were invited to fill in the questionnaire. After the first analysis, it was determined that the population of the collected data did not fit the needs of the study. As a result, the field survey methodology replaced the previous one.

4.10 The Empirical Data

The empirical material gathered came from 361 Turkcell GSM subscribers. 85 of them are in the permission based Turkcell database and 276 of them are in the non-permission based Turkcell database. The characteristics of the sample were explained in the next sections.

4.11 Managing Empirical Material

The empirical material gathered trough the survey was put together into Microsoft Excel worksheets. To confirm or dismiss the hypotheses SPSS was used to run different tests to find out whether the hypotheses are statistically supported. The prepared charts will be presented in the same order as the questions in the survey.

4.12 Construction of the Hypotheses

A hypothesis is constructed in order to determine whether statistical evidence enables us to conclude that a belief about a parameter is supported by data. Hypotheses are gathered to test quantitative data against literature or previous findings. These hypotheses have been presented in the literature review, and in this section it will be illustrated which factors were taken into consideration for the tests later on.

T-test will be used to test the significant differences between the means of two independent variables. Here, the null hypothesis states that the means are equal. Tests will be applied at a significance level (α) of 0.05. Such a difference is significant if the p-value is less than 0.05.

Chi-square-test will also be used to test independency between categorical variables. The independency between the variable attitude and demographical ones will especially be tested. A contingency table is used for chi-square tests; the test is based on the fit between observed frequency and expected frequency at each cell. Here, the null hypothesis states that two categorical variables are independent. Tests will again be applied at a significance level (α) of 0.05. Such independence is significant if the p-value is less than 0.05.

Additionally, correlation coefficients will be used. Correlation means the level of relationships between variables and significant correlation coefficients, if these means are statistically different from zero; it provides a strong relationship between variables.

4.12.1 Credibility Criteria

To fulfill different credibility criteria's the researcher should measure what he/she intended to measure and do it in a good way so the measurements done should be generally applicable. It is therefore important to look at the survey respondent's validity, reliability and generalization.

4.12.2 Validity

Validity measures whether the data collection instrument measured what it was supposed to measure. The researcher should consider if the empirical data he/she

gathered really is relevant to use and fulfils the purpose of the study. If the researcher identifies that a large part of the data collected is irrelevant then the validity of the data will be very low because of the data not fulfilling its primary purpose. To avoid collecting irrelevant data all the questions were constructed based on the problem statement and hypotheses. By eliminating questions that would not contribute any relevance to the purpose of this study, it was also aimed to collect empirical data with a high degree of validity.

Factor analysis is used for validity. Factor analysis is a statistical method used to explain variability among observed variables in terms of fewer unobserved variables called factors. Factor analysis can be evaluated by the statistic named Kaiser-Meyer-Olkin measure of sampling adequacy. This measure gives higher values for good fitting. Factor analysis also helps to test how the data meets the requirements of the conceptual model. Using this method, each factor is determined and variables that are irrelevant are eliminated. Then, some new variables are produced instead of many others. The minimum required sample size is known as five times of the number of the variables used. That means too small a number of samples with respect to the numbers at hand, implying no problem of sample size to apply factor analysis.

4.12.3 Reliability

Reliability measures if the conducted study is trustworthy. To have a study with high dependability, the data collected for it should be as stable as possible. When the data is stable, the researcher should be able to measure the same result. Someone else should also be able to reproduce the study and reach the same result. If the measurements within different occasions show different results, the data measured is not stable. The reliability of the data collected also depends on the response rate and the design of the survey a researcher distributes to a target sample. To avoid low response rates, the questionnaire was handed out personally to the target sample. The questionnaire has also gone through pilot test before being distributed to assure that

the questions will be correctly formulated and easy to understand. With this, a high reliability of the measurements to be performed on gathered data was aimed at.

Reliability analysis for factors that are produced in factor analysis is used. Reliability can be evaluated by the statistic named Cronbach's Alpha. In social sciences, this statistic is accepted to be good around 0.70, poor below 0.60 and perfect above 0.80. A good reliability value gives one confidence to use a factor instead of variables that construct the factor.

4.12.4 Generalization

In quantitative studies, the researcher often aims to show that that the measurements done on a chosen sample could be generalized and representative for the rest of the target population. It is therefore of great importance to identify a target sample that is the most representative for the whole target population. To be able to generalize the findings on statistical ground, the researcher should use probability sampling techniques. Convenience sampling was used to gather the empirical material. It could therefore be hard to generalize the findings on statistical ground. The choice of a homogenous group as students can also affect the result. By doing this, young adults who have full time jobs and those who are unemployed are not taken into consideration. Omission of them limits the possibility to generalize the findings from the empirical data.

4.12.5 Sampling Error

If the researcher is not performing a study of the whole population, samplings error can occur. A sampling error is the difference between the chosen sample and the population the sample is based on. The target sample was Turkcell GSM subscribers; the definition of them was according the GSM numbers. The survey was not controlled before the needed amount of responses was collected. Therefore, sampling

error is something that has to be taken into consideration when gathering the empirical data.

4.12.6 Handling Error

When the researcher has gathered the empirical material and investigated it, he/she must then handle it. When handling data, it is important to take in mind different types of handling errors that can occur. The most common handling errors are coding, registration to the computer and handling the data put inserted to the computer. To avoid errors when coding the questions in the survey, every response was given alternative numbers for each question. Before registering the answers to the computer, the empirical data was gathered manually on paper to see if the amount of answers were in order and to find out if any type of partial reduction had occurred. After performing this, the data was fed into the computer. To avoid errors while handling the data in programs like Excel and SPSS, a plan as to which type of charts to be created and which variables to be correlated against each other was planned. By doing that, it was aimed not to miss anything to have all the variables in order.

4.12.7 Reduction Error

There are two types of reduction error. These are individual reduction and partial reduction. In an individual reduction, the respondents who have received a survey, do not fill it out and do not send it back. Partial reduction occurs when a respondent fills out the survey provided to him/her but misses to fill out some questions. In the case under consideration, individual reduction was not a problem. The surveys were handed out to the respondents and collected directly when they were done. The partial reduction on the other hand was something that had to be considered. Control of each and every survey was impossible and when questions were not answered, respondents could not be asked to answer them. The partial reduction was handled by

presenting it for every question where it occurred. If the partial reduction was very big on a specific question possible reasons will be discussed for why it occurred.

4.12.8 Measurement Error

Measurement error is the difference between the presented value and the true value. To avoid measurement errors, it is of great importance for the measuring process to carry high validity and reliability. It has been already discussed how trying to reach high validity and reliability is managed. For instance, a very high response rate is aimed in the study for higher reliability and for high validity; the research problem was in focus when survey questions were designed to avoid irrelevant questions.

In order to achieve the objectives reported above, the methodological approach was implemented firstly with an analysis of the secondary sources in order to define an initial concept of mobile marketing and its context. This analysis provided the basic information in order to select primary sources. Secondly, as primary sources were selected, a sample of 300 GSM subscribed people belonging different groups were segmented on their permission levels for mobile marketing activities. The information collected within the analysis of the primary sources was processed in order to identify: sources of competitive edges, critical success factors of the different firms, and the set of relationships among different organizations of the value chain.

Data was collected by means of direct interviews and internet surveys to GSM subscribers.

4.13 Expected Implications of My Dissertation

This research will respond to the growing interest among researchers of permission based mobile marketing factors using Turkey as its research field. Previous researchers often used quantitative data, gathered through surveys and negotiation experiments, in order to measure acceptance for mobile marketing activities. However, the mechanism in which culture influences the factors and behavior in dispute resolution effort has not been studied well enough – especially for Turkey. In response, this Dissertation collects qualitative evidence from the field and analyze the influence of context on the permission based mobile marketing activities. My dissertation will propose a conceptual framework and model for developing successful mobile marketing activities. I argue, however, the adaptation is not sufficient enough both for international countries and for Turkey. My dissertation will contribute to the literature of international policy transfer by suggesting the need for better understanding for mobile marketing and implementing a new system for permission based mobile marketing activities in Turkey.

By providing new insights into the mobile marketing phenomena in Turkey from an institution's perspective, this research will contribute to the field of Turkish studies. The research will have tangible impacts on marketing processes in Turkey by presenting fairer, more efficient, wiser, and more stable ways to create tailored marketing concepts. This research will build the institutional framework of designing and managing the marketing processes integrated with mobile marketing in Turkey.

Chapter

5   Results

5.1   Scope and Methodology

The work has been limited to subscribers of Turkcell, the leading GSM operators in Turkey as measured by the number of subscribers, because it was taken advantage of Turkcell database's ability to point out the subscribers who have given permission for mobile marketing activities. So, the permission status of subscribers participating in the survey is known. As a result, the study was driven on Turkcell customers but findings which will be interpreted for all GSM subscribers in Turkey.

A field research was performed and questionnaire to collect data was used. Firstly, a pre-questionnaire was prepared and forwarded to participants by using a web site. Then, upon feedbacks the final questionnaire was prepared. The final questionnaire contained 18 questions and can be seen in the Appendix A. Six questions were related with demographics and twelve were related with mobile marketing attitude. Demographics were measured in categorical scale whereas attitude was measured with a five level Likert-Scale. Moreover, phone numbers of participants were asked but will not be shared in accordance with privacy.

Data was collected through face to face interviews and research had covered about six hundred random participants. Many participants were not included in data analysis since some of them were subscribers of other GSM companies and some has got both missing values and response in bias. Final data set used in analysis has 361 cases of 18 fields.

5.2   Demographics

Participants have almost homogeneous distribution with respect to their gender. Gender (GENDER) as a variable has two categories with six missing values. The pie chart (Figure 5.1) shows the distribution of gender in proportion.
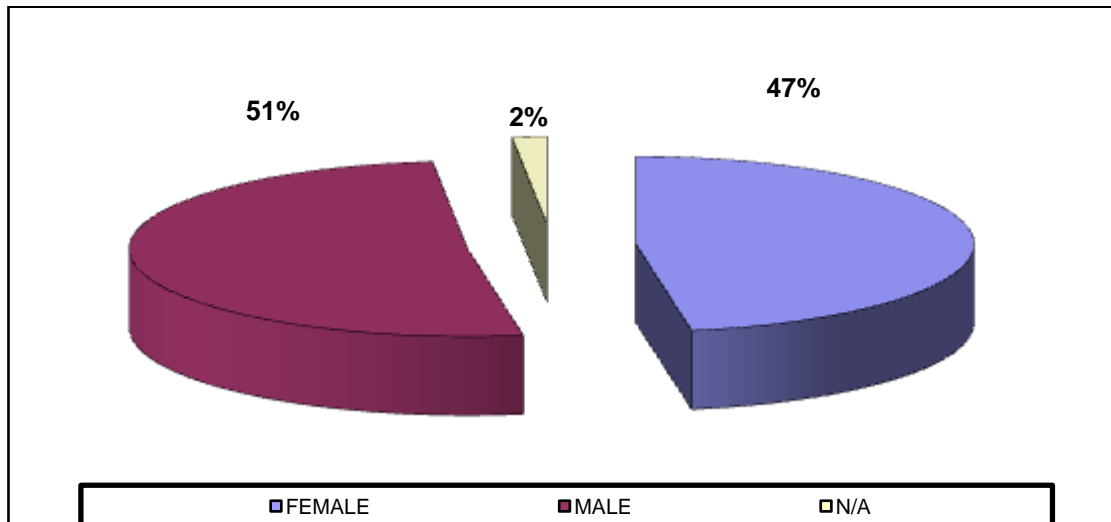
Figure 5.1 Distribution of Gender

Age (AGE) as a variable has six categories and seven missing values. Most of participants (89%) are below 40. It is possible to say that the distribution of AGE is compatible to Turkey's has a relatively young population. The pie chart (Figure 5.2) shows the distribution of age in proportion.
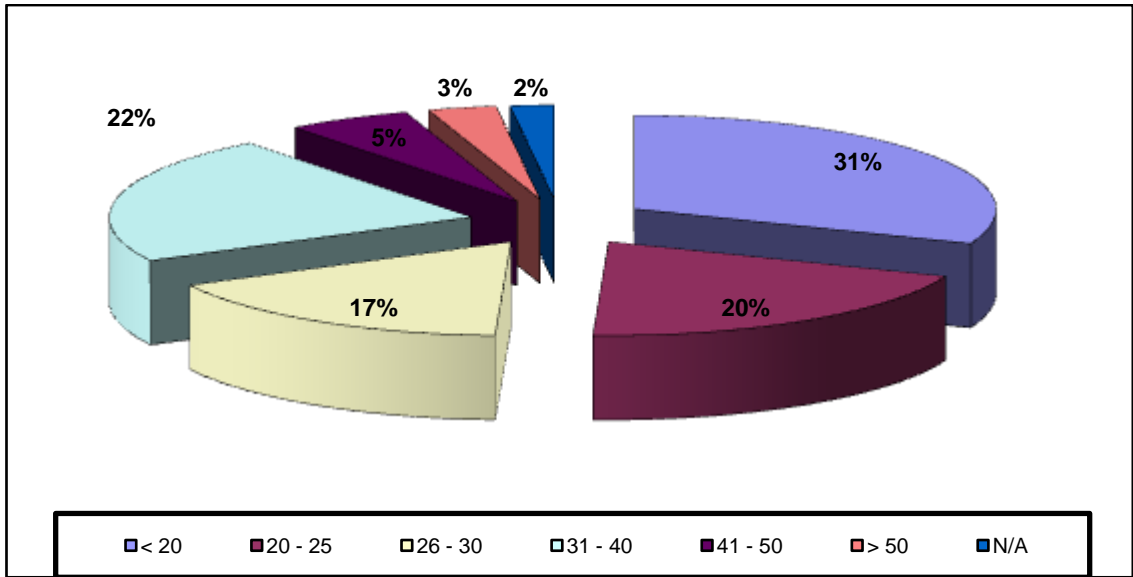
Figure 5.2 The Distribution of Age

Participants are mostly at high school or graduate level. 30% of participants are at high school level and 49% of them are graduates. Education (EDU) as a variable has four categories and only two missing values. The pie chart (Figure 5.3) shows the distribution of education level in proportion.
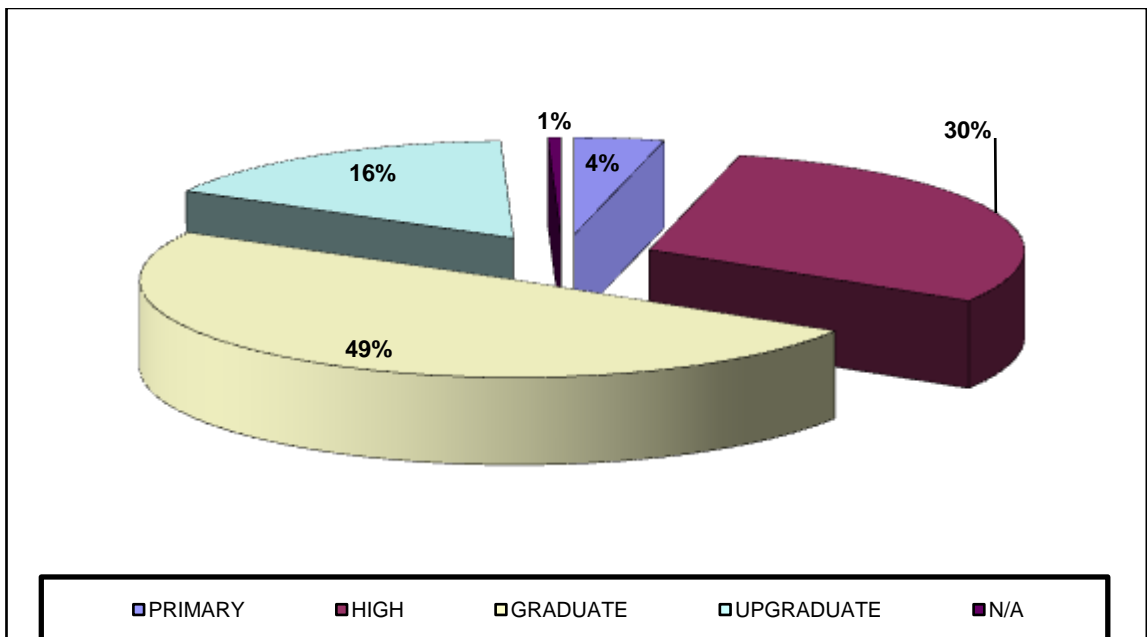
Figure 5.3 The Distribution of Educational Level

Majority of participants do not have work experience. That high proportion (41%) is consistent with the results of variable AGE. Work experience (EXP) variable has six categories in years and only two missing values. The pie chart (Figure 5.4) shows the distribution of work experience.
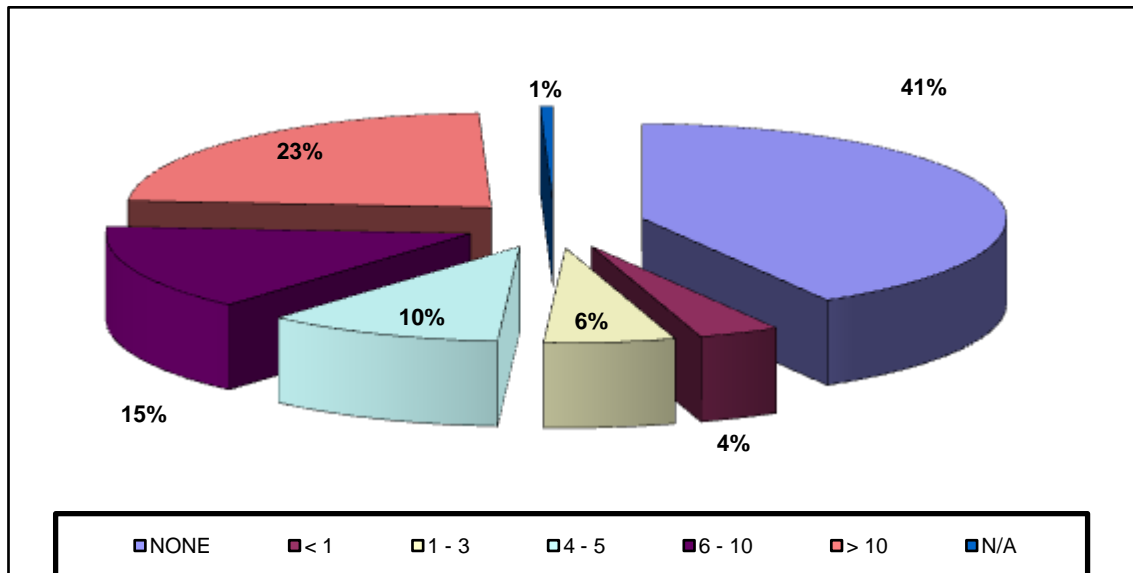
Figure 5.4 The Distribution of Work Experience

Another variable (SER) has information about the usage of services that is given by the operator. 39% of participants do not use any services whereas 49% of them are members of GencTurkcell, a service addresses young population. The pie chart (Figure 5.5) shows the distribution of service used.

Figure 5.5 The Distribution of Services Used

Most of the participants (38%) had never used any services before. The variable (ONCE) implies the services that had been used at least once and has one hundred and thirty eight missing values. The pie chart (Figure 5.6) shows the distribution of services used at least once.
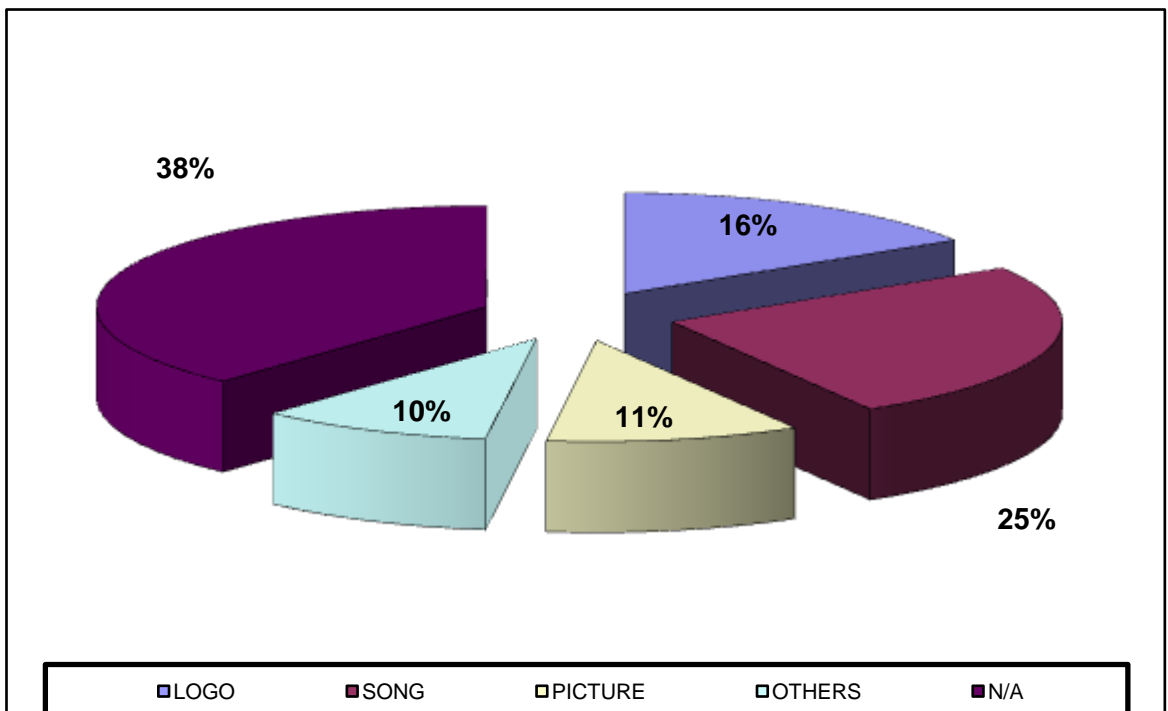
Figure 5.6 The Distribution of Service Used At Least Once

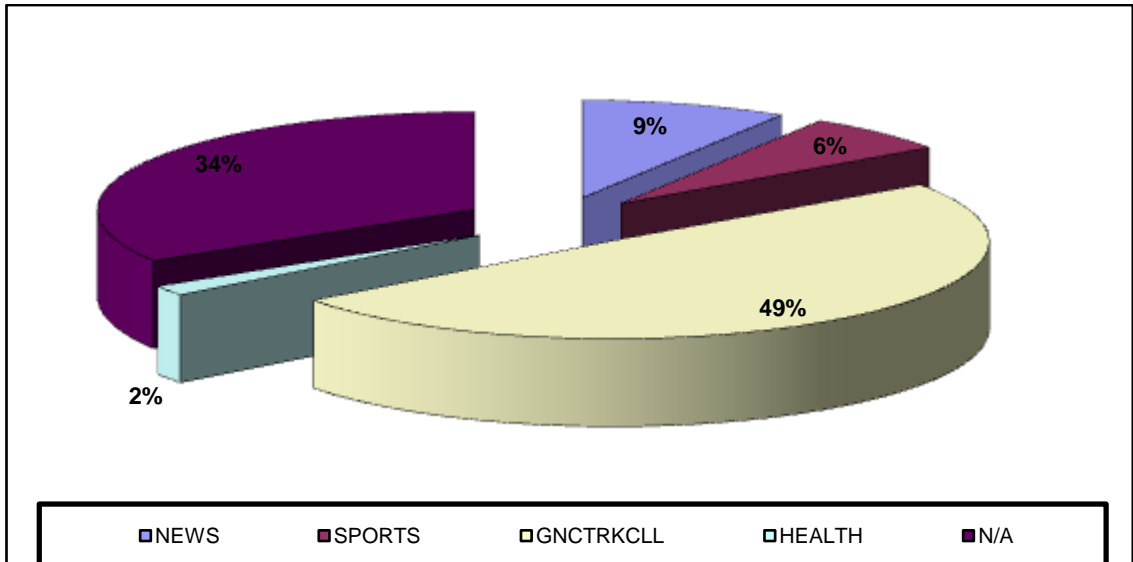As a starting point, demographics gave some information about the sample. The sample was homogeneous with respect to gender and they were young people in average. These findings support the general characteristics of population in Turkey. But educated and short work experienced structure of the sample may cause inconsistency with the population. Besides that, it is possible to say that GSM subscribers are not very interested to various operator services.

Success of all researches is known to depend on the quality of data. It is very important how the data can represent the population since the findings of this work will be interpreted for all GSM subscribers in Turkey. Because of this, it was need to return to these findings in the conclusion section.

5.3   Validation and Reliability

Factor analysis, a statistical technique that is used to reduce data, will be used to test the suggested model which is thought as a measure of PBMM attitude of GSM subscribers in Turkey. As indicated before, twelve questions were raised to the participants with the questionnaire. Here, the aim for using factor analysis is to measure in how many dimensions the participants' attitude works towards PBMM and how these dimensions overlap according to the proposed model.

The first application of factor analysis was driven on data resulted in 0.8040 of KMO measure which is used to measure the adequacy of sampling. That value of KMO is accepted as almost perfect in common.

Moreover, Barlett's Test of Sphericity value which is used to measure the degree of relationship between variables as a requirement for factor analysis application was calculated as 1270.82 at a significance level of 0.05. That value is enough to apply

factor analysis with significance 0.000. The results mean that the factor analysis is appropriate for data. The table (Table 5.1) shows the results of these calculations.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,804
Bartlett's Test of Sphericity	Approx. Chi-Square	1270,818
	df	66
	Sig.	,000

Table 5-1 KMO and Bartlett's Test

The table below (Table 5.2) shows the result of factor analysis which gives four dimensions of PBMM attitude in accordance with the proposed model. Factors include successively three variables, five variables, two variables and two variables. Although there is no matter that overrides the factor analysis, the variable Q12 has near factor loadings in all factors. This means the variable can be used to explain all factors and is not appropriate. Therefore, the variable Q12 was excluded and the factor analysis was used again using eleven variables.

	Component			
	1	2	3	4
Q8	,848	,260		
Q9	,845	,206	,199	
Q10	,842		,162	,153
Q4	,160	,710	,271	
Q5	,317	,664	,298	
Q11	,221	,663		,158
Q3		,498	,285	,325
Q12	,238	-,477	,280	,333
Q1		,142	,851	
Q2	,244	,157	,791	
Q6	-,141			,833
Q7	,262		,130	,732

Table 5-2 Rotated Component Matrix

Tables (Table 5.3 and Table 5.4) show the results of factor analysis repeated except for Q12. The statistics KMO and Barlett's are good enough with the values 0.8010 and 1227,69 at a significance level of 0.05. That means factor analysis is still applicable.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,810
Bartlett's Test of Sphericity	Approx. Chi-Square	1227,698
	Df	55
	Sig.	,000

Table 5-3 KMO and Bartlett's Test

The rotated component matrix guides that PBMM attitude has four dimensions. Factors included successively three variables, four variables, two variables and two variables. But, Q3 had a problem similar to Q12 in the first application. It has near factor loadings in three different factors. That means Q3 can be used to explain these factors not only the Factor II. So, factor analysis was repeated by excluding Q3 in order to reach better results and ten variables were used in the next factor analysis.

	Component			
	1	2	3	4
Q10	,853		,166	,147
Q9	,842	,231	,197	
Q8	,841	,286		
Q11	,158	,768		,127
Q4	,121	,734	,264	
Q5	,274	,719	,273	
Q3		,419	,342	,351
Q1		,158	,837	
Q2	,262	,129	,807	
Q6	-,134			,832
Q7	,302		,171	,755

Table 5-4 Rotated Component Matrix

After Q3 was excluded, a factor analysis was made and the result was appropriate for all criteria. The measure of KMO for the sampling adequacy is calculated as 0.7940 and Barlett's test result is 1154.14 (Table 5.5). The sampling is adequate at level of 80% and relationship between variables is good enough to continue.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,794
Bartlett's Test of Sphericity	Approx. Chi-Square	1154,140
	Df	45
	Sig.	,000

Table 5.5 KMO and Bartlett's Test

	Component			
	1	2	3	4
Q10	**,858**		,163	,136
Q9	**,842**	,230	,198	
Q8	**,841**	,287		
Q11	,147	**,783**		,146
Q4	,115	**,739**	,276	
Q5	,263	**,730**	,289	
Q1		,158	**,844**	
Q2	,248	,141	**,822**	
Q6	-,142			**,854**
Q7	,298		,183	**,765**

Table 5.6 Rotated Component Matrix

It can be seen that rotated component matrix (Table 5.6) produced still four factors and all variables had strong factor loadings. Finally, there were four dimensions related to PBMM attitude and they were in accordance with the proposed model.

Factor I includes the variables Q10, Q9, Q8. The questions corresponding to these variables aim to measure the usability dimension of PBMM attitude. So that factor was called as Usability.

Factor II includes the variables Q11, Q4, Q5. The questions corresponding to these variables aim to measure the acceptance dimension of PBMM attitude. So that factor was called as Acceptance.

Factor III includes the variables Q1, Q2. The questions corresponding to these variables aim to measure the Remembrance dimension of PBMM attitude. So that factor was called as Remembrance.

Factor IV includes the variables Q6, Q7. The questions corresponding to these variables aim to measure the interaction dimension of PBMM attitude. So that factor was called as Interaction.

Briefly,

Factor I explains the usability attitude of PBMM.

Factor II explains the acceptance attitude of PBMM.

Factor III explains the Remembrance attitude of PBMM.

Factor IV explains the interaction attitude of PBMM.

These results proved the proposed model and the questionnaire. In other words, results verify that the proposed model is valid. In the next step, test of the reliability of each factor was made.

Reliability analysis was performed to verify the accordance of variables in each factor and is interpreted by using Cronbach's Alpha test statistics. The threshold value for Cronbach's Alpha is accepted as 0.70 in common.

Usability was tested for reliability and Cronbach's Alpha value was calculated as 0.8600. That is a quite high value and proves the reliability of the factor usability. It was determined that no better solution occurs if any item of the factor is excluded.

Acceptance was tested for reliability and Cronbach's Alpha value was calculated as 0.7020. That value is good enough and proves the reliability of the factor acceptance. It was determined that no better solution occurs if any item of the factor is excluded.

Remembrance was tested for reliability and Cronbach's Alpha value was calculated as 0.7000. That value is good enough and proves the reliability of the factor remembrance. It was determined that no better solution occurs if any item of the factor is excluded.

Interaction was tested for reliability and Cronbach's Alpha value is calculated as 0.5180. This does not prove the reliability of the factor interaction. But it was determined that no better solution occurs if any item of the factor excludes. Here, that factor could be excluded for further analysis. Instead, it was not excluded but will be reminded that factor is not reliable for all future analysis.

Data highlights the four dimensions and these overlap factors of the proposed model. And these factors are reliable except for the third one. In result of analysis, defined factors were USABILITY, ACCEPTANCE, REMEMBRANCE and INTERACTION.

5.4   Testing Hypotheses

The independent - samples T test procedure compares means for two groups of cases. Ideally, for this test, the subjects should be randomly assigned to two groups, so that any difference in response is due to the treatment (or lack of treatment) and not to other factors.

The test is to determine if the two sets of results are consistent with each other (come from the same parent population) or whether there is a difference between them. Tests may be two - sided to look for a difference, or one - sided to look for a significant decrease (or increase). Similarly, tests may be carried out at the 5% or the 10% level, and the interpretation of the results will depend upon the calculated value of the test statistic and its comparison to a critical value [81].

Whereas the T test would indicate whether or not there is a significant mean difference in a dependent variable between two groups, an Analysis of Variance will help to examine if there are significant mean differences in more than two groups. The results of ANOVA will indicate whether or not the means of the various groups are significantly different from one another or not. If there are significant mean differences among the groups as indicated by the significance level of the F statistic, there is no way of knowing from the ANOVA results alone where the differences lie. Several tests such as Scheffe's test, Duncan Multiple Range test, Turkey's test, and Student – Newman – Keul's test are available and can be used, as appropriate, to detect where exactly the mean differences lie [82].

5.5 Findings

In this section it was analyzed; if PBMM perception determines PBMM attitude or not.

Following chart (Figure 5.7) shows the proportion of subscribers of permitted or not permitted subscribers for mobile marketing activities. Data was taken from Turkcell database and covers all participants of research. According to data, 276 participants did not permitted for mobile marketing activities but 85 participants did permitted.

It was tested for some significant differences in mobile marketing activities with respect to the PBMM attitude factors. A logistic regression model was constructed in order to prove how mobile marketing activities influences PBMM attitude.
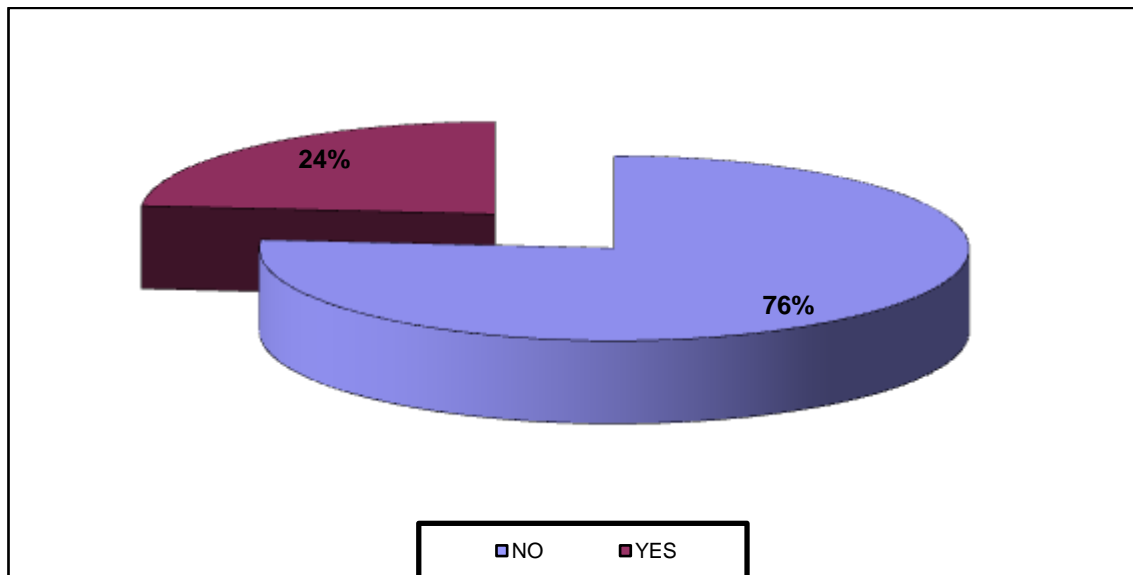
Figure 5.7 The Distribution of PBMM Attitude

H_0: There is no difference in USABILITY with respect to PBMM attitude

H_1: There is difference in USABILITY with respect to PBMM attitude

H_0 was not rejected because the significance of T statistics was calculated as 0.2340 at a significance level of 0.05. Here, variances of gender categories were accepted as equal since the significance of F statistics that tests the differences of variances is 0.6520 at a significance level of 0.05.

H_0: There is no difference in ACCEPTANCE with respect to PBMM attitude

H_1: There is difference in ACCEPTANCE with respect to PBMM attitude

H_0 not rejected because the significance of T statistics was calculated as 0.5260 at a significance level of 0.05. Here, variances of gender categories were accepted as equal since the significance of F statistics that tests the differences of variances is 0.9330 at a significance level of 0.05.

H_0: There is no difference in REMEMBRANCE with respect to PBMM attitude

H_1: There is difference in REMEMBRANCE with respect to PBMM attitude

H_0 not rejected because the significance of T statistics is calculated as 0.0870 at a significance level of 0.05. Here, variances of gender categories were not accepted as equal since the significance of F statistics that tests the differences of variances is 0.0270 at a significance level of 0.05.

H_0: There is no difference in INTERACTION with respect to PBMM attitude

H_1: There is no difference in INTERACTION with respect to PBMM attitude

H_0 not rejected because the significance of T statistics is calculated as 0.8260 at a significance level of 0.05. Here, variances of gender categories were accepted as equal since the significance of F statistics that tests the differences of variances is 0.9430 at a significance level of 0.05.

These results showed that there is not any significant difference in PBMM attitude with respect to different permission groups at a significance level of 0.05. In other words, difference in the four factors did not result in different attitudes. These facts were not expected and the decision was to build the logistic regression model.

An important point is shown in REMEMBRANCE. Although there is no significant difference in REMEMBERANCE at significance level of 0.05, significance was detected for a significance level of 0.10. Accordingly, REMEMBRANCE is the closest attitude to get a distinction for groups.

Finally, there was work to prepare a logistic regression model that would replace linear regression if the dependent variable is dichotomous. Here the PBMM attitude was used as a dependent variable and factors affecting it as independent. And it was tested to find a causal connection between dependent and independent variables. Dependent variable is dichotomous and takes values 0 or 1.

For a binary response, the regression model

$$E(Y) = \alpha + \beta X$$

is called a linear probability model. The linear probability model has a major structural defeat. Probabilities must fall between 0 and 1, whereas linear functions take values over the entire real line. Because of the structural problems with the linear probability model, it is better to study models implying a curvilinear relationship between X and E(Y). A function having this shape is

$$E(Y) = \frac{\exp\ (\alpha + \beta x)}{1 + \exp\ (\alpha + \beta x)}$$

Called as the "logistic regression function" [83].

Both the method that all independent variables are taken together into model and the method that independent variables are taken stepwise into the model do not work for the data. The result means that none independent variables has no enough information to get a distinction for the groups. But REMEMBRANCE is shown as the one that is closest to get a distinction for groups with significance 0.1240 as it happened in hypothesis testing before.

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	388,055	,016	,025

Table 5.7 Logistic Regression – Enter Method Results

Additionally, Nagelkerke R Square statistics (Table 5.7) that define the strength of the logistic regression model is calculated as 0.0250 and Hosmer – Lemeshow testing that defines the significance of logistic regression model results in a significance level of 0.2910 (Table 5.8). Logistic regression model is delicate according to

Nagelkerke R Square statistics and insignificant according to Hosmer – Lemeshow testing (Table 5.9).

Step	Chi-square	df	Sig.
1	9,638	8	,291

Table 5-8 Summary of the Model

			Predicted		
			READINESS		Percentage Correct
Observed			NO	YES	
Step 0	READINESS	NO	276	0	100,0
		YES	85	0	,0
	Overall Percentage				76,5

Table 5-9 Hosmer and Lemeshow Testing Results

All analysis performed in this section showed that there is no difference in PBMM attitude of GSM subscribers in Turkey. There could be several reasons as listed below;

- Randomness of sampling; it is not valid if the data represent the population.

- Disequilibrium in the proportions; There is a huge difference between the proportion of participants who permitted and the proportion of participants who did not permitted.

- Unconsciousness; GSM technology is an evolving phenomenon and mobile marketing activities are not broadened enough - subscribers are still not aware of it.

- Adverse effect; subscribers did not choose to use mobile marketing activities because of recent disturbing applications of GSM operators.

5.6   Demographical Findings

In this section, it will be tested statistically for significant differences of PBMM Attitude factors according to gender, age, education level and work experience based on the proposed model. Each valid hypothesis, test results and meaning of results are given below.

H_0: There is no difference in USABILITY with respect to GENDER

H_1: There is difference in USABILITY with respect to GENDER

H_0 was not rejected because the significance of T statistics was calculated as 0.3600 at a significance level of 0.05. Here, variances of gender categories were accepted as equal since the significance of F statistics that tests the differences of variances is 0.7350 at a significance level of 0.05.

H_0: There is no difference in USABILITY with respect to AGE

H_1: There is difference in USABILITY with respect to AGE

H_0 was rejected because the significance of analysis of variance was calculated as 0.0000 at a significance level of 0.05. Here, it is determined that under age 20 category emphasized significant difference based on Scheffe statistics. USABILITY attitude of ages under 20 is clearly low with respect to other categories.

H_0: There is no difference in USABILITY with respect to EDU

H_1: There is difference in USABILITY with respect to EDU

H_0 was rejected because the significance of analysis of variance was calculated as 0.0000 at a significance level of 0.05. Here, it is determined that this category was emphasized significant difference based on Scheffe statistics. USABILITY attitude of high category is clearly low with respect to other categories.

H_0: There is no difference in USABILITY with respect to EXP

H$_1$: There is difference in USABILITY with respect to EXP

H$_0$ was rejected because the significance of analysis of variance was calculated as 0.0000 at a significance level of 0.05. Here, it is determined that unemployed category emphasized significant difference based on Scheffe statistics. USABILITY attitude of unemployed category is clearly low with respect to other categories.

H$_0$: There is no difference in ACCEPTANCE with respect to GENDER

H$_1$: There is difference in ACCEPTANCE with respect to GENDER

H$_0$ was not rejected because the significance of T statistics was calculated as 0.2900 at level 0.05. Here, variances of gender categories were accepted as equal since the significance of F statistics that tests the differences of variances is 0.6500 at a significance level of 0.05.

H$_0$: There is no difference in ACCEPTANCE with respect to AGE

H$_1$: There is difference in ACCEPTANCE with respect to AGE

H$_0$ was rejected because the significance of analysis of variance was calculated as 0.0020 at a significance level of 0.05. Here, it is determined that the under 20 age category emphasized significant difference based on Scheffe statistics. Acceptance for the less than 20 age category was clearly low with respect to other categories.

H$_0$: There is no difference in ACCEPTANCE with respect to EDU

H$_1$: There is difference in ACCEPTANCE with respect to EDU

H$_0$ was rejected because the significance of analysis of variance was calculated as 0.0010 at a significance level of 0.05. Here, it is determined that this category emphasized significant difference based on Scheffe statistics. Acceptance of this category is clearly low with respect to other categories.

H$_0$: There is no difference in ACCEPTANCE with respect to EXP

H_1: There is difference in ACCEPTANCE with respect to EXP

H_0 was rejected because the significance of analysis of variance was calculated as 0.0000 at a significance level of 0.05. Here, it is determined that unemployed category emphasized significant difference based on Scheffe statistics. Acceptance of this unemployed category is clearly low with respect to other categories.

H_0: There is no difference in REMEMBRANCE with respect to GENDER

H_1: There is difference in REMEMBRANCE with respect to GENDER

H_0 was not rejected because the significance of T statistics was calculated as 0.2150 at a significance level of 0.05. Here, variances of gender categories were accepted as equal since the significance of F statistics that tests the differences of variances is 0.3600 at a significance level of 0.05.

H_0: There is no difference in REMEMBRANCE with respect to AGE

H_1: There is difference in REMEMBRANCE with respect to AGE

H_0 was not rejected because the significance of analysis of variance is calculated as 0.1920 at a significance level of 0.05.

H_0: There is no difference in REMEMBRANCE with respect to EDU

H_1: There is difference in REMEMBRANCE with respect to EDU

H_0 was rejected because the significance of analysis of variance was calculated as 0.0060 at a significance level of 0.05. Here, it is determined that high category emphasized significant difference based on Scheffe statistics. REMEMBRANCE of this category is clearly low with respect to other categories.

H_0: There is no difference in REMEMBRANCE with respect to EXP

H_1: There is difference in REMEMBRANCE with respect to EXP

H_0 was not rejected because the significance of analysis of variance was calculated as 0.8060 at a significance level of 0.05.

H_0: There is no difference in INTERACTION with respect to GENDER

H_1: There is difference in INTERACTION with respect to GENDER

H_0 was not rejected because the significance of T statistics is calculated as 0.2210 at a significance level of 0.05. Here, variances of gender categories were accepted as equal since the significance of F statistics that tests the differences of variances was calculated as 0.2540 at a significance level of 0.05.

H_0: There is no difference in INTERACTION with respect to AGE

H_1: There is difference in INTERACTION with respect to AGE

H_0 was rejected because the significance of analysis of variance was calculated as 0.0020 at a significance level of 0.05. Here, it is determined that 41-50 intervals emphasized significant differences based on Scheffe statistics. Interaction of 41-50 intervals was clearly low with respect to other categories.

H_0: There is no difference in INTERACTION with respect to EDU

H_1: There is no difference in INTERACTION with respect to EDU

H_0 was rejected because the significance of analysis of variance was calculated as 0.0060 at a significance level of 0.05. Here, it is determined that primary category emphasized significant difference based on Scheffe statistics. Interaction of primary category was clearly high with respect to other categories.

H_0: There is no difference in INTERACTION with respect to EXP

H_1: There is no difference in INTERACTION with respect to EXP

H_0 was rejected because the significance of analysis of variance was calculated as 0.0130 at a significance level of 0.05. Here, it is determined; more than ten years category emphasized significant difference based on Scheffe statistics. Interaction of more than ten years category was clearly low with respect to other categories.

PBMM attitude may vary with respect to demographical characteristics. To summarize;

There are not any significant differences in PBMM attitude with respect to gender. Both gender groups have the same level of PBMM attitude.

- There are significant differences in PBMM attitude with respect to age except for Remembrance attitude. Respondents younger than 20 years of age took less into consideration usability, acceptance whereas 41-50 interval did for interaction.

- There are significant differences in PBMM attitude with respect to educational level. Respondents with higher educations took less into consideration usability, acceptance and Remembrance whereas primary level did more for interaction.

- There are significant differences in PBMM attitude with respect to work experience level expect for Remembrance. Respondents who were unemployed took less into consideration usability and acceptance; whereas respondents with more than 10 years of experience did for interaction.

Chapter

6 Conclusions

The purpose of this paper was to create a better understanding of mobile marketing in order to draw conclusions of factors influencing consumer attitudes towards this new marketing medium. The focus has been to highlight factors driving permission of user's attitude towards permission based mobile marketing. The problem statement for this paper is: Is it possible to develop an extended permission based model for better success of mobile marketing?

The result from this study shows that users have generally negative attitudes towards mobile marketing. Regarding the problem about what factors affect consumer attitudes towards mobile marketing following conclusion can be drawn;

Within the hypotheses where each presents a different driver that could affect consumer's attitude towards mobile marketing, generally weak positive relation has been identified. It came to the conclusion that hypothesis have been confirmed, although the relation is weaker than the literature indicates. In order to make mobile marketing into a lucrative business a huge consideration is to focus on providing value for the customers to use this service.

This study has provided an insight into the area of mobile marketing and clarified attitude towards mobile marketing. It has also managed to identify different factors influencing attitudes towards this new marketing. A limitation of this study is that it's focused on Turkcell GSM subscribers and that the study relies on the quality of the permission based and non-permission based databases within Turkcell.

This study has provided a view on consumer attitudes towards a new rising marketing channel defined as mobile marketing. This study has also defined that the parts involved in mobile marketing industry are consumers, advertisers, and the mobile network providers or service operators. This new marketing approach has lots of opportunities for new companies in the market, and it may be expected that several new companies in this area will take their place in the mobile marketing market within few years. A study on how these companies build up their strategies and design their mobile service will thus provide a new interesting area for further research. Another interesting area for further studies would also be to see if the design and structure of the mobile marketing services match the findings that this paper has provided.

Mobile marketing will go through tremendous growth in the coming years. It will be very interesting to witness the progress and see whether it will become one of the common used marketing channels like the internet. It would also be interesting to repeat this study in the future when mobile marketing becomes a more established concept among consumers and see if their attitudes towards mobile marketing and their attitude to participate in mobile marketing activities have changed.

Another result of this study is that risk perception negatively determines the attitude toward mobile marketing. Risk perception in the context of mobile marketing mainly results from the fear of data misuse and the reception of unwanted mobile marketing messages. Clearly, the establishment of a well-founded basis of trust for mobile marketing as a generic form of marketing communication has to be a major goal for all marketers. This is the prime prerequisite for consumers' attitude to permit the reception of mobile marketing activities on their mobile phones and to provide personal data for the personalization of those messages. Thus, it is a prerequisite for the consumer acceptance of mobile marketing.

The conclusions elaborated above not only deliver valuable implications for marketing practitioners but also reveal some major directions for future research on mobile marketing. The factor named as Remembrance was defined the first time as

an additional and important factor affecting the attitude towards mobile marketing. The probability for Consumers' to remember any kind of offers made in the past is related to the "differentiation" of the offer itself and the value proposed to the right consumer segment. Even if consumers will not participate in a mobile marketing immediately, the potential to win them as actors of one of the participants later may increase according to this factor. Therefore offers in the message should be designed in a "differentiated" manner and they should propose the right offer to the right audience.

Further research is also needed on the concept of permission marketing. As this concept appears to be a prime prerequisite for mobile marketing acceptance the ideal way of implementing this idea needs to be identified. Research in this context should reveal how consumers prefer to provide permission and profile information

Another field of future research should address the issue of risk perception of mobile marketing. In this context it will be necessary to thoroughly survey consumers' main sources of risk perception in order to be able to address it.

Separate studies could be conducted on the mobile networks and marketing industries to find out the unique problems of each industry and their interaction with one another, as the two markets appeal to be more integrated in the near future. With a more detailed analysis of each of these industries, the problems and corresponding strategies of companies can also be dealt with in more depth.

A detailed study on one particular segment of the value chain could also yield interesting results. Such a study would allow a comparison between the strategies of mobile marketing in the same segment. This is of interest as marketers react to the exact same external environment differently, due partly to their different resources, backgrounds, personalities and competencies. The same set of factors is perceived differently by different marketers, thus directly affecting their market strategies. This

is especially evident in the wireless industry as the uncertainties surrounding its future demand that marketers make many assumptions.

Since the study is only conducted to mobile phone users in Turkey, similar studies can be done in other countries. The startups may face different problems and therefore adopt different strategies from their Turkish counterparts. Comparisons across countries could be useful for marketers wanting to enter a foreign market.

Finally, a longitudinal study can be carried out. A few marketers could be selected as case studies. Their rationale for particular strategies would then be documented and their success tracked over time. The impact of strategies on future success can then be determined.

References

[1]   Figge, S., Schrott, G., "3G "ad" Work - 3G's breakthrough with Mobile marketing", Chair for Mobile Commerce and Multilateral Security, Johann Wolfgang Goethe-Universität Frankfurt, 2004.

[2]   Castells, M., Fernandez-Ardevol,M., Linchuan J., Sey A., "A Cross-cultural Analysis of Available Evidence on the Social Uses of Wireless Communication Technology", The mobile Commucation society, 2004.

[3]   Marcussen, C., "Comparing SMS and WAP in Europe with I-mode in Japan", IIR Telecoms & Technology, London, January 2002.

[4]   Heinonen, K., Strandvik T., "Consumer Responsiveness to Marketing Communication in Digital Channels", Swedish School of Economics and Business Administration, Helsinki, Finland, 2004.

[5]   Scharl, A., Dickinger, A., Murphy, J. "Diffusion and Success Factors of Mobile Marketing", Business School, University of Western Australia, Institute for Tourism and Leisure Studies, Vienna University of Economics and Business Administration, Vienna, December 2003.

[6]   Bauer, H., Reichardt, H.T., Barnes, S.J., "Driving Consumer Acceptance of Mobile Marketing: A Theoretical Framework and Empirical Study", University of Mannheim, Journal of Electronic Commerce Research, Vol. 6, No.3, 2005.

[7]   Komulainen, H., Mainela, T., Tähtinen, J., Ulkuniemi, P., "Exploring Customer Perceived Value in a Technology Intensive Service Innovation", University of Oulu, Department of Marketing, Finland, Proceedings of the 20th IMP Conference, Copenhagen, Denmark, 2004.

[8]   Leppäniemi, M., Karjaluoto, H.,"Factors Influencing Consumers' willingness to Accept Mobile marketing: A Conceptual Model", Faculty of Economics and Business Administration, University of Oulu, Finland, Int. J Mobile Communications, Vol. 3, No. 3, 2005.

[9]   Drossos1, D., Giaglis, G.M.,"Factors Influencing Mobile Messaging Advertising Effectiveness", Department of Management Science and Technology, Athens University of Economics and Business, Athens, Greece, Eltrun Working Paper Series, 2004.

[10]   Haghirian, P., Madlberger M., Tanuskova A., "Increasing Advertising Value of Mobile Marketing – An Empirical Study of Antecedents", Kyushu Sangyo University, Japan, Vienna Unversity of Economics and Business Administration, Austria, Proceedings of the 38th Hawaii International Conference on System Sciences, 2005.

[11]   Intemann, C., "Location-based Systems - Two New Implementations - MobiSys 2004", Zentrum for Informatics, University of Goettingen, December 2004.

[12]   Brum, M., "M-Commerce: The role of SMS Text Messages" MBA student, School of Marketing, Kingston University, United Kingdom, 2003.

[13]   Tähtinen, J.,"Mobile marketing or Mobile Marketing. A Need for a New Concept ? ", Frontiers of E-Business Research, 2005.

[14]   Okazaki, S., "New Perspectives on M-Commerce Research", College of Economics and Business Administration, Autonomous University of Madrid, Spain,2003.

[15]   Schwarz, T., "Permission macht Kunden süchtig", Marketing, Max Schimmel Verlag, Würzburg,2000.

[16]   Salo, J., Tähtinen, J., "Retailer Use of Permission-Based Mobile marketing", Department of Marketing, University of Oulu, Finland, 2001.

[17]   Fraunholz, B., Unnithan C.R.,"SMS Growth and Diffusion – A Preliminary Investigation of Three Economies", 2001.

http://www.deakin.edu.au/infosys/research/workingpapers/index.php

[18]   Höflich, J.R., "Das Handy als „persönliches Medium".Zur Aneignung des Short Message Service (SMS) durch Jugendliche", kommunikation@gesellschaft, Jg. 2, 2001.

http://www.uni-frankfurt.de/fb03/K.G/B1_2001_Höflich.pdf

[19]   Schwarz, T., "Leitfaden Permission Marketing", Max Schimmel Verlag, Würzburg, 2000.

[20]   Rettie, R.,"Text Message Advertising: Response Rates and Branding Effects", Kingston University, New Media and Communications, February 2005.

[21] Gogus, C., "Understanding Young Adults' Participation in Mobile Sales Promotions", Henley Management School, UK, August 2004.

[22] Nysveen, H., Pedersen P.E., Thorbjørnsen H., "Using Mobile Services to Strengthen Brand Relationships: The effects of SMS and MMS Channel Additions on Brand Knowledge, Satisfaction, Loyalty and Main Channel use by SNF- project no. 6500", Mobile and Channel Integrating Electronic Commerce; Ericsson and EasyPark, 2003.

[23] Mohr, R., Nösekabel, H., "V-Card: Sublimated Message and Lifestyle Services for the Mobile Mass-Market", University of Regensburg, Chair of Business Informatics III, Regensburg, Germany, 2004.

[24] Yunos, H.M., Gao, J., "Wireless Advertising"; Department of Computer Engineering", San Jose State University, 2002.

[25] Andersson, P., "Acceptance of Mobile Services: Insights from the Swedish Market for Mobile Telephony", Working Paper Series in Business Administration Stockholm School of Economics Department of Marketing, Stockholm, Sweden, 2002.

[26] Mallat, N., Rossi, M. Tuunainen, V.K., Öörni, A., "The Impact of Use Situation and Mobility on the Acceptance of Mobile Ticketing Services", Helsinki School of Economics, Proceedings of the 39th Hawaii International Conference on System Sciences, 2006.

[27] Hahn, P., Fritsch, L., "Studie zur Akzeptanzanalyse von Location-based Services", Lehrstuhl für M-Commerce und Mehrseitige Sicherheit, Frankfurt, 2005.

[28]   Kaasinen, E., "User acceptance of Mobile Services – Value, Ease of Ese, Trust and Ease of Adoption", VTT Information Technology , Thesis for the degree of Doctor of Technology, Tampere University of Technology, June 2005.

[29]   Landor, P., "Understanding the Foundation of Mobile Content Quality A Presentation of a New Research Field Institute for Advanced Management Systems Research", Åbo Akademi University, Finland, Proceedings of the 36th Hawaii International Conference on System Sciences, 2003.

[30]   Multimedia Mobiles Give Marketers a Brighter Promotional Picture, Gartner Inc. and/or its affiliates, 2004.

[31]   Retailers: Get Moving with Mobile Marketing that Engages Shoppers, Gartner Inc. and/or its affiliates, 2004.

[32]   Awad, N.F., Krishnan, M.S., "The Personalization Privacy Paradox: An Empirical Evaluation of Information Transparency and the Willingness to be Profiled Online for Personaliation", Wayne State University, U.S.A., MIS Quarterly Vol. 30, March 2006.

[33]   Sugai, P., "Mapping the Mind of the Mobile Consumer across borders: An Application of the Zaltman Metaphor Elicitation Technique", Graduate School of International Management, International University of Japan, International Marketing Review, Vol. 22, 2005.

[34]   Okazaki, S., "Mobile marketing Adoption by Multinationals", University of Madrid, Madrid, Spain, Internet Research, Vol. 15, 2005.

[35] Yan, X., Gong, M., Thong, J.Y.L., "Two Tales of one Service: User Acceptance of Short Message Service (SMS) in Hong Kong and China", Hong Kong University of Science and Technology, Hong Kong., Vol. 8, 2006.

[36] Petty, R.D., "Wireless Advertising Messaging: Legal Analysis and Public Policy Issues", Babson College. Journal of Public Policy & Marketing.Vol.22, 2003.

[37] Steinbock, D., "Mobile Revolution : The Making of Worldwide Mobile Markets", London, GBR: Kogan Page, Limited, 2005.

[38] Godin,S., "Permission Marketing", Simon & Schuster, 1999.

[39] Innovative Interactive Mobile marketing Platform (IMAP) Project, "Analysis of user requirements", Research Report, 2002.

http://www.imapproject.org/imapproject/hmain.jsp

[40] Ovum; "Ovum forecasts: global wireless markets 2002–2006", Research Report, 2002.

[41] Nokia; "Java MIDP business opportunities", Software Goes Mobile Seminar, Korea, 2003.

http://www.forum.nokia.com/seap/events/mobile_software/mobile_material

[42] Nelson, R., "Wireless advertising: what's in it for telcos?", Global Telephony, 2000.

[43]   Fuller, P., "Why spam doesn't have to happen on mobile devices", Mobile
        Marketing Association, 2003.

        http://www.mmaglobal.com/about/index.html

[44]   eMarketer; "SMS marketing yields strong results", eMarketer Research
        Report, UK, 2003.

[45]   American Marketing Association; AMA Dictionary of Marketing Terms,
        2003. http://www.marketingpower.com/live/mg-dictionary.php

[46]   Mobile   Marketing   Association;   "Wireless   Definitions",   2003.
        http://www.mmaglobal.com/about/index.html

[47]   Add2Phone; "European mobile marketing: case Add2Phone", NETS
        Seminar, Helsinki, Finland, 2003.

[48]   Enpocket, "Consumer Preferences for SMS Marketing in the UK", Research
        Report 1, 2002.

        http://www.enpocket.com

[49]   Nokia, "New Nokia Research Shows Consumers Ready for M-marketing via
        Mobile   Handsets",   HPI   Research   Group,   Research   Report,   2003.
        http://press.nokia.com/PR/200201/846567_5.html

[50]   Saunders, C., "Studies: mobile ad market to grow, amid risks", Internet
        Advertising Report, 2003.

        http://www.internetnews.com/IAR/article.php/915121

[51]   Nikulainen, K., "Consumers perceive mobile marketing as positive", Digitoday, 2003.

http://www.digitoday.fi

[52]   Craft Digital, "Mobile Marketing: Permission Based Mobile Marketing", 2003. http://www.craft-digital.com/mobile_marketing.htm

[53]   Evans, N.D., "Business Agility-Strategies for Gaining Competitive Advantage Through Mobile Business Solutions", Prentice Hall, 2002.

[54]   Barnes, S.J. "Wireless Digital Advertising: Nature and Implications", International Journal of Advertising, 2002.

[55]   Barnes S.J., Scornavacca, E., "Mobile Marketing: The Role of Permission and Acceptance", International Journal of Mobile Communications, 2004.

[56]   Silberer, G., Wohlfahrt, J., "Akzeptanz und Wirkungen des Mobile Banking", Strategien im M-Commerce, Schaeffer-Poeschel, Stuttgart, 2001.

[57]   Godin, S., "Permission Marketing", FinanzBuch-Verlag, Munich, 2001.

[58]   Kölmel, B., "Location Based Services, Mobile Commerce-Anwendungen und Perspektiven", Key Pousttchi nad Klaus Turowski, Geselaschaft für Informatik, Bonn, 2003.

[59]   Rao, B., Minakakis, L., "Evolution of Mobile Location-Based Services", Communications of the ACM, 2003.

[60]   Kroeber-Riel, W., Weinberg, P., "Konsumentenverhalten", Verlag Franz Vahlen, München 2003.

[61]   Steinbock, D., "The Mobile Revolution: The Making of Mobile Services Worldwide", Kogan Page, 2005.

[62]   MacPherson K., "Permission-Based E-Mail Marketing That Works!", Kaplan Professional, 2001.

[63]   Barnes, S.J., Scornavacca, E., "Unwired Business: Cases in Mobile Business", IGI Publishing, 2006.

[64]   Facchetti, A., Rangone, A., Renga, F.M., Savoldelli, A., "Mobile marketing: an analysis of key success factors and the European value chain", Int. J. Management and Decision Making, Vol. 6, No. 1, pp.65–80, 2005.

[65]   Clarke, I., Flaherty, T.B., "Retailer Use of Permission-Based Mobile marketing - Advances in Electronic Marketing", Idea Group Publishing, 2005.

[66]   Bloomberg, F.N., "Permission in Action—The Internet as a Permission-Only Zone", 2003.

[67]   Gilligan, R., Henizmann, P., "Exploring how cultural factors could potentially influence ICT use: An analysis of European SMS and MMS use", Cultural difference workgroup, COST 269, (Version No. 1), April 2004.

[68]   Sweeney, S., MacLellan, A., Dorey, E., "3G Marketing on the Internet, Seventh Edition", Maximum Press, 2006.

[69]   Stone M., Foss, B., "Wireless Customer Management, Successful Customer Relationship Marketing: New Thinking, New Strategies, New Tools for Getting Closer to Your Customers", Kogan Page, 2001.

[70]   Nunnally J.C., "Psychometric Theory", 1 st ed., McGraw Hill, New York, NY, 1967.

[71]   Nunnally J.C., "Psychometric Theory" , 2nd ed., McGraw Hill, New York, NY, 1978.

[72]   Rettie R., Grandcolas U., Deakins B., "Text message advertising: Response rates and branding effects Received (in revised form)", Journal of Targeting, Measurement and Analysis for Marketing Vol. 13, 4, 304–312, Henry Stewart Publications, 2005.

[73]   Wang P., Petrison L., "Direct Marketing Activities and Personal Privacy: A Consumer Survey", Journal of Marketing, Vol.7 Nr.1, Winter 1993.

[75]   Okazaki S., "How do Japanese consumers perceive wireless ads?   A multivariate analysis", International Journal of advertising, 2004.

[76]   Kalakota, R., Robinson, R. "e-Business 2.0", Pearson Education, 2nd Revised edition, December 2000.

[77]   Gallacci, L., "Telecommunications Industry Report", eMarket Services, ICE Italy, January 2006.

[78]   Esther T., "Market Entry Strategies Of Wireless Startups", Thesis In Co-operation with Fisher Institute for the Strategic Use of Information Technology, Haas School of Business, University of California, Berkeley & Telecom Business Research Center, Lappeenranta University of Technology, Finland, September 2002.

[79]   Porter, M.E., "Competitive Strategy: Techniques for Analyzing Industries and Competitors", The Free Press, 1998.

[80]   Anderson J., Williams, B., "Unbundling the Mobile Value Chain", Blackwell Publishing, Volume 15, Number 3, September 2004.

[81]   Curwin, J., Slater, R., "Quantitative Methods for Business Decisions", Thomson Business Press, 4th Edition, 1998.

[82]   Sekaran U., "Research Methods for Business", John Wiley and Sons, 2nd Edition, 1992.

[83]   Agresti A., "Categorical Data Analysis", John Wiley and Sons, 1990.

[84]   Report from the Information Society Technologies Advisory Group (ISTAG), "Shaping Europe's Future Through ICT", March 2006.

[85]   Gamble, P.R., "Marketing Revolution: The Radical New Approach to Transforming the Business, the Brand & the Bottom Line", Kogan Page, 2005.

[86]   Drucker, P., "Management Challenges for the 21st Century", Harper Coolins, 1999.

[87]   Becker, M., "Unfolding of the Mobile Marketing Ecosystem: A Growing Strategic Network", Prepared for the Global Mobile Marketing Association, October 2005.

[88]   Clarke, R., "Direct Marketing and Privacy", Department of Computer Science, Australian National University, February 1998.

[89]   Stone M., Foss, B., "Successful Customer Relationship Marketing: New Thinking, New Strategies, New Tools for Getting Closer to Your Customers", Kogan Page, 2001.

[90]   Fischer, C.S., "America Calling: A Social History of the Telephone to 1940", University of California Press, 1994.

Appendix A – Survey in Turkish Language

Q1	Mesajın içeriği "farklı" ise hatırlarım.
Q2	Mesajın içeriği işime yarıyorsa hatırlarım.
Q3	Cep telefonu ile bir çekilişe katıldığımda mesajın maliyeti benim için önemli.
Q4	Cep telefonu ile çekilişlere katıldığımda istemediğim SMS mesajları ile rahatsız edileceğimi düşünüyorum.
Q5	Mesaj yazmak için çok zaman harcamak istemiyorum, katılmak kolay ve basit olmalı.
Q6	Ben cep telefonu ile çekilişlere katıldığımda başkaları etkilenir, ben de başkalarından etkilenirim.
Q7	Renkli ve hareketli reklam mesajları beni daha çok etkiler.
Q8	Mesaj çok sık olmamalı.
Q9	Mesaj doğru zamanda doğru yerde olmalı
Q10	Cep telefonuma mesaj ilen gelen faydalı önerileri kullanırım.
Q11	Cep telefonu ile katıldığım kampanyalarda benimle ilgili elde edilen özel bilgilerim risk altındadır.
Q12	Ben cep telefonu ile yapılan reklam çalışmalarına ilgiliyim.

Table A.0-1 Survey in Turkish Language

Appendix B - Survey in English Language

Q1	Message differentiation	If the message is different I will remember it.
Q2	Message usefulness	If the message is useful I will remember it.
Q3	Pricing and Cost to consumer	The cost to participate in a mobile marketing campaign is very important to me
Q4	Relevance of the selected data	There is a risk of receiving unwanted SMS-messages when using mobile marketing services.
Q5	Ease of Use	I will not spend to much time to write my messages and it should be "easy" to participate.
Q6	Environment	If I use mobile marketing services most of the people will regard it as valuable.
Q7	Attractivity of adversiting	If I receive colored/animational advertising messages it will be more attractive for me.
Q8	Frequency of delivery	The advertising messages should not too much.
Q9	Time of delivery	The advertising messages should be on the right time and the right place.
Q10	Perceived Utility	I can benefit from advertising messages via the mobile phone.
Q11	Perceived Risk	There is a risk of personal data being misused when using mobile marketing services.
Q12	Behavior towards MM	My general intention to use mobile marketing services is very high

Table B.0-1 Survey in English

Appendix C –Terms

1G : First generation, circuit-switched analog cellular telephone systems introduced in early 1980s for speech services: e.g. AMPS (Advanced Mobile Phone Service) in the United States, NMT (Nordic Mobile Telephones), NTT (Nippon Telephone and Telegraph), and TACS (Total Access Communication System) in the United Kingdom

2G: Second generation, circuit-switched digital cellular telephone systems introduced in late 1980s for speech and low bit rate data with more advanced roaming than in 1G: e.g. GSM, IS-95 (U.S. CDMA; Code Division Multiple Access), PDC (Personal Digital Cellular) in Japan, and US-TDMA (D-AMPS; Digital AMPS)

API: Application Programming Interface is a function library that application programs use to utilize services offered by the operating system

GPS: Global Positioning System, GSM Global System for Mobile (Tele) communications is currently the most widely used technology standard for 2G mobile networks and phones. It provides digital voice and data services at maximum 14.4 kilobits per second. Improvements to the original GSM standard have increased the data rates: High Speed Circuit Switched Data (HSCSD) at maximum 115.2 kilobits per second and General Packet Radio Service (GPRS) at maximum 182.4 kilobits per second (depending on the coding). As of March 2004, there were 1050 million reported subscribers in GSM networks worldwide.

GUI: Graphical User Interfaces apply the following basic components: a movable pointer symbol that is used to select objects and commands; a pointing device (usually a mouse, joystick, trackball, or touchpad) that is used to control the pointer; small icons that are used to represent commands or objects, a display-wide desktop where icons representing computing resources such as files, computers, documents, or printers, are grouped; windows that present the output from the executing

applications to the user; and menus that are used to present available commands to the user.

HTML: Hyper-Text Markup Language,

I-MODE NTT: DoCoMo's packet-based information service, technology, and business model to deliver Internet content to mobile phones

JAVA: A hardware-independent programming language developed by Sun Microsystems

MIDP: Mobile Information Device Profile is a set of Java APIs for mobile devices

OEM: Original Equipment Manufacturer is a company manufacturing a product to be marketed under another company's brand

PSMS (premium SMS): Premium means the service user will be charged an incremental fee instead of the basic text charge. The transaction usually involves participation in a program, purchase of a ring tone or wallpaper, or something similar.

R&D: Research and Development

UI: User Interface

Mobile video: It is exactly what it sounds like: watching TV, music videos, commercials, etc. from your mobile device.

Personally Identifiable Information (PII): Data which can be used to identify or contact a person uniquely and reliably, including but not limited to name, address, telephone number, and e-mail address.

Non-Personally Identifiable Information (Non-PII): Data not uniquely and reliably linked to a particular person, including but not limited to activity on a wireless network such as location or log files related to Web browsing activity on a mobile device.

Wireless Push Advertising and/or Content (Push Messaging): Content sent by or on behalf of advertisers and marketers to a wireless mobile device at a time other than when the subscriber requests it. Push Messaging includes audio, short message service (SMS) messages, e-mail, multimedia messaging, cell broadcast, picture messages, surveys, or any other pushed advertising or content.

Wireless Pull Advertising and/or Content (Pull Messaging): Content sent to the wireless subscriber upon request shortly thereafter on a one time basis. For example, when a customer requests the local weather from a WAP-capable browser, the content of the response, including any related advertising, is Pull Messaging.

Standard Opt-In: A process that requires active choice on the part of the wireless subscriber to grant permission.

Confirmed Opt-In: A process of verifying a subscriber's permission in order to ensure that Push Messages and/or Contents are not accidentally or maliciously sent to his wireless mobile device. For example, after receiving permission from a subscriber, an advertiser or marketer may send a message to the subscriber to which s/he must positively reply in order to confirm permission to start receiving Push Messaging.

Wireless Spam is defined as (Push Messaging) Sent without Confirmed Opt-In.

Permission Level: The level of permission a user/device has granted to a specific carrier or service or wireless content site to receive advertising messages from them, as defined by the WAA Guidelines on Privacy and Spam.

Screen Characteristics: The pixel size and color of the device screen that can display advertising. This would include text limit for SMS messaging.

Response Capability: The ability of the user to respond based on the feature set of the user's device. (Examples: SMS with embedded 800 Number, SMS 2 way, WAP).

Potential Audience: The total number of unique users/devices that is reached by any site's content (pull advertising), or the number of addressable devices to which the service provider or marketer has the permission and ability to push advertising (push advertising).

Curriculum Vitae

Hakan Tetik was born in Bursa in 1968. He received his BS degree in Computer Engineering from Istanbul Technical University in 1993 and MBA degree from the Marmara University at Istanbul in 1998.

He began working as an entrepreneur in 1989, with the foundation of a computer wholesaler company. After 1994 he specialized in programming and modeling. Afterwards he worked in different sales and marketing positions inside Turkey beginning as manager; in 1998 as director. In 1999 he joined Vestel, then Servus Bilgisayar as Vice President for Sales and Marketing and in 2003 he was responsible for Dell Corporate Sales and Genreal Manager for Obis inside Sentim Bilisim. Since 2005 he is founder and managing partner of Dataport a golden certified partner of Turkcell and Microsoft.

Throughtout his professional carrer or investments Mr.Tetik was specialized in new business development, innovation programs, strategy and marketing. He is meanwhile a professional trainer of TMI Turkey and is doing consultancy for many companies.

Mr.Hakan Tetik is married since 1993 and has two sons.