Utilization of Mobile Advertising in B2C Marketing

Mirza Kamran
Sadia Sharmin Juena

Luleä University of Technology
D Master thesis
Business Administration
Department of Business Administration and Social Sciences
Division of Industrial marketing and e-commerce
Utilization of Mobile Advertising in B2C Marketing

by

Sadia Sharmin Juena, Kamran Mirza

A thesis submitted in partial fulfillment for the degree of Master of Science

in the Division of Industrial Marketing and e-commerce
Department of Business Administration and Social Science

July 2008
Mobile advertising is becoming a hot topic as wireless networking continues to develop and the number of mobile subscribers is increasing worldwide. Thus mobile phone opens up a new dimension for the marketer to build strong customer relationship by providing the customers with their desired information through mobile phones at any place any time. However, little is known about how mobile technologies and applications can be incorporated into marketing activities in contrast to internet-based advertising. The effects of mobile advertising have not been investigated sufficiently. The purpose of this study, therefore, is to provide a better understanding on how mobile advertising can be utilized in B2C marketing. In order to reach this purpose, three research questions were asked about the applications in mobile advertising, the technologies available, as well as the success factors. Using the research questions as a guide, a literature review was conducted, resulting in a conceptual framework, developed to guide the study’s data collection. In order to collect data, a qualitative approach and multiple case strategy has been utilized, using personal interviews and limited documentation to collect data. The findings and the conclusion of this study indicate that technology acts as the primary facilitator of mobile advertising. To increase the popularity of mobile advertising applications, factors such as personalization, customer permission, control and privacy should all be considered by the companies with high importance. Companies must keep in mind that the mobile phone is a very personal device, so any services provided via mobile phone should be dealt very carefully...
Acknowledgements

The work presented in this study was done during the fall of 2007 and spring of 2008 at Lule University of Technology (LTU) in the department of Business Administration and Social Science.

At first, we would like to thank the almighty Allah. Secondly, we would like to thank our supervisor Tim Foster, who is working in the division of Industrial Marketing and e-Commerce in Lule University of technology (LTU). He always helped us while conducting the study, helping us find the best solutions to our problems. He provided his specialized knowledge in our research area.

Thirdly, we would like to thank especially to our friend A.N.M. Zaheduzzaman Sarker (husband of Sadia Sharmin Juena), who provide us a lot of support during this study.

And finally, we would like to thank our parents and the respondents who provide us their important interviews for this study...
# Contents

Abstract ........................................... ii

Acknowledgements .................................... iii

List of Figures ....................................... v

List of Tables ......................................... vi

1 Introduction ........................................ 1

1.1 Background ......................................... 1

1.1.1 e-Business ....................................... 1

1.1.2 e-Commerce ...................................... 2

1.1.3 e-Marketing ...................................... 3

1.1.4 Online advertising ............................... 3

1.1.5 m-Commerce and it’s applications ............... 5

1.2 Problem discussion ................................... 5

1.3 Research purpose and Research Questions .......... 8

1.4 Outline of the thesis ............................... 8

2 Literature Review .................................... 10

2.1 m-Advertising ....................................... 10

2.2 Different applications of m-advertising ............ 11

2.2.1 Mobile Couponing ............................... 11

2.2.2 Information Services ............................ 12

2.2.3 Mobile CRM ..................................... 13

2.2.4 Branding ......................................... 14

2.2.5 Entertainment .................................... 15

2.2.6 Product launches ............................... 15

2.2.7 Location based services ....................... 16

2.3 Mobile advertising enabling technologies .......... 17

2.3.1 SMS ............................................ 17

2.3.2 MMS ............................................ 18

2.3.3 Bluetooth ....................................... 19

2.3.4 WAP ............................................ 20

2.3.5 i-Mode .......................................... 20
# List of Figures

1.1 Number of worldwide mobile phone users ......................... 6  
1.2 Outline of Thesis ............................................. 9  

2.1 Addressing location issue in mobile commerce .................. 11  
2.2 An overview of mobile couponing ................................. 12  
2.3 How SMS works between sender and receiver cell phone ......... 18  

3.1 Emerged frame of reference of mobile advertising ............... 29  

4.1 Methodology Summary ........................................... 35  

7.1 Overview of mobile advertising applications .................... 59  
7.2 Modified frame of reference of mobile advertising ............. 62
List of Tables

2.1 Example of location based mobile advertisement. .......................... 16
5.1 A comparison and evolution of 1G, 2G, 3G and 4G wireless networks . 42
6.1 Cross case analysis of Research question 1 ............................... 53
6.2 Cross case analysis of Research question 3 ............................... 55
Chapter 1

Introduction

This chapter starts with a background to the research area followed by the reasons why this area is interesting to study. This will result in a problem discussion and end with formulating the study’s overall purpose and specific research questions. At the end there will be demarcation and disposition of the thesis a summary of the chapter.

1.1 Background

e-business is helpful in achieving the new challenges of business sector (Yoffie and Cusumano, 1999). Under this roof electronic commerce is working as a successful factor of promotion of business (Portor, 2001). For this purpose different tools are using for the success of electronic marketing and these tools are not workable without information technology (Cornelisessen et al., 2001). Online advertising is working as banner advertising on the internet that is a flag of identification of the company (Chaffey et al., 2003).

1.1.1 e-Business

The economic environment of the world is now dominated by three powerful influences: globalization, the knowledge and information revolution, and structural change in organizations (Hamilton, 2002). According to Sprano and Zakak (2002), the internet, satellite communication and fiber optics have created a massive technological revolution. They also state that, these new global networks of technologies have generated a platform which will modernize the competitive landscape for business within an ever-closer world.
According to Fillis et al., (2003), there is no definition of e-business which is accepted universally and this term e-business is used interchangeably. But for understanding the term e-business we can use the definition given by IBM (Hooft et al., 2001): “A secure, flexible and integrated approach to deliver differentiated business value by combining the systems and processes that run core business operations with the simplicity and reach made possible by internet technology”. (p. 44).

In an international benchmarking study Chaffey and Mayer (2003), describe e-business as follows: “When a business has fully integrated information and communications technologies (ICTs) into its operations, potentially redesigning its business process around ICT or completely reinventing its business model. e-business, is understood to be the integration of all these activities with the internal process of a business through ICT” (p.12).

Hooft et al., (2001), define e-business as a powerful vehicle in a company for various types of improvements. They also argue that it can be used to represent a compatible and visionary business approach by effectively managing the transformation of a traditional business strategy. According to Pavic et al., (2007), e-business is for more than just technology and for escalating business success and performance, it is utilizing the internet and other information and communication technologies. Follit et al., (2000) refers interconnectivity and system interaction as the most vital function of e-business.

He also argues e-business automation has eliminated many human functions, such as unnecessary keyboard input, intervention and internal reprocessing of electronic business information. As a result the efficiency of business interaction enhanced and errors reduced. Rodgers et al., (2002) states, e-business generate a platform which enables the service providers to interact with their suppliers and customers, which results in increased loyalty, increased profits and competitive advantage. So, its a powerful concept that connects customers, employees, suppliers and distributors to the business systems and information which they need (Hooft et al., 2001; Rodgers et al., 2002). Chaffey and Mayer (2003) consider e-commerce as the subset of e-business.

1.1.2 e-Commerce

According to Bandoy-padhyay (2002), “e-commerce required the application of computer and telecommunication technologies in the business process” (p. 6) These technologies are working as a bridge of e-commerce making the connectivity between two platforms that is easy and fast than traditional commerce.

Bandoy-padhyay (2002), also states in the year of 1993 while the World Wide Web (www) came into action, that it is not only changing the picture of the world, it enables
users to make faster, easier and cheaper communication which facilitates and helps true electronic commerce.

According to Savoie et al., (1999), it is in the buyers control to buy the product and services with one click and there is no time restriction in electronic commerce system. One benefit of e-commerce is that it has enabled the seller to collect detailed information about customer preferences, which helps the marketer to understand the customers mind and with such an understanding they can create a more specific marketing strategy. Without understanding the customers need desire or choice a good marketing strategy cannot display a beneficial picture and now it is possible through e-commerce (Savoie and Raisinhani, 1999).

1.1.3 e-Marketing

“The internet is creating a virtual culture, which has its own form of manners (netiquette), members of society (citizens) and method of expressing emotions (emoticons) for those who have matured in the net generation ” (Rettie et al., 2002, p. 254). It is clear that that there are many marketing functions with which the Internet can assist to establish competitive advantage (Robins, 2000).

Electronic marketing is also a wide subject, and the literature contains many different streams and definitions. One of the most discussed topics in the last decade is e-commerce (Pandya et al., 2002). If mobile telephones and digital TV are to be used as tools to access the internet, then interactive marketing or electronic marketing is more appropriate term than internet marketing (Harridge, 2004).

The established tools of promotion, such as advertising, sales promotion and direct marketing have been augmented by the development of information technology, which offers the potential to communicate with many customers. Telephone marketing, e-mail and mobile telephony, as well as digital TV and the internet, have supplemented these traditional tools. With e-commerce marketer can reach customers easily by advertising through internet. It can be done either by generalized way such as through mass e-mail or personalized way such as sending messages to targeted customers. (Cornelisessen and Lock, 2001)

1.1.4 Online advertising

“Online advertising is a form of advertising utilizing the internet and World Wide Web in order to deliver marketing messages and attract customers. Examples of online advertising include contextual ads on search engine results pages, banner ads, advertising
Advertisements on web sites are usually in the form of banner ads that work as a flag of the company (Chaffey and Mayer, 2003). Banner advertisements are becoming more clear on the internet comparatively with traditional advertising. Search engines are now very helpful for convincing the customers to visit a particular website site and for increasing the attraction every company has for its own advertising strategy (Janal, 2000).

According to Janal (2000), “There are two sides to online advertising, a legitimate one and an illegitimate one. The legitimate side of online advertising includes search engine advertising, desktop advertising, online advertising directories, advertising networks and opt-in e-mail advertising. The illegitimate side is dominated by e-mail advertising” (p. 160). He also states marketer should always remember that among all other internet applications e-mail is mostly used, so it can be utilized as a very effective advertising vehicle. (ibid).

The internet offers new interactive tools for advertisers to build one-to-one relationships with consumers for the purpose of creating lifetime value. Customers of online systems have a style of their own. They are not typical consumers. According to demographic information supplied by commercial services, the average online consumer is more educated. Advertising is effective in the online world only when it adopts the principles of the soft sell, where advertising is based on information instead of emotion, and where messages have an attitude or personality that presents the company and missions of companies become successful. Advertisers can also measure the response to an advertisement (through the number of times adverts are clicked on, the number of purchases or leads an advertisement generated, etc). However, people are very careful about pop up and spam advertising. (Janal, 2000). Bandoy-padhyay (2002), describes some common techniques used in online advertising:

- **Banner**: A graphical image which is placed in the websites and portals. If a user clicks on the banner it will take the user to the advertisers website. There are also ad-server companies which can send messages concurrently to multiple websites, measure results, create reports on campaign etc. (Bandoy-padhyay, 2002).

- **e-mail**: Referred as spam, and this is the online version of junk mail. On the basis of the buying behavior of the customers, e-mails can also send to a targeted group. For example: emails about new releases can be send to those customers who have bought the pop music in last three or six months (Bandoy-padhyay, 2002).

- **Viral marketing**: Customers contacts are used to spread a message through internet. For example: for the free mail service all the recipients of messages through
hotmail are presented with an offer. For encouraging the users many companies are offering a facility in their websites where a user can send his/her web page with their address. Later on these interested users will send the advertisement to their friends (Bandoy-padhyay, 2002).

- Partnership between organizations: in this type companies display the banners of each others. These companies can be related with each other like: holiday companies and hoteliers. And can also be irrelevant to each other, in this case the partnership can be formed by contract such as payments. For example: Amazon.com pays its associates each time they make a sale by using such links (Bandoy-padhyay, 2002).

- Splash display: a message including information about the product, a button to access the web page etc. that display for a few seconds at the time the user is online is called splash display (Bandoy-padhyay, 2002).

1.1.5 m-Commerce and it’s applications

Organizations from all sectors and nations are now responding to the growing market of mobile commerce services (Krishnamurthy, 2003). Mobile Commerce is changing the landscape within which it is appearing (ibid). It is not just an extension to the Web, with the cell phone handset or wireless PDA, it is taking the place of the desktop PC. Mobile commerce has core characteristics that differ from those of the classic internet, and these in turn demand a reappraisal of the B2B/B2C model (ibid). According to Varshney and Vetter (2002), various applications of m-commerce can be found in marketing, for example: mobile financial applications, mobile inventory management, product location and shopping, proactive services management, mobile auction, entertainment and so on. More over m- advertising is considered as one of the most important applications of m-commerce at present (ibid).

1.2 Problem discussion

Mobile advertising is becoming a hot topic as the wireless networking is developing very fast and as a result the numbers of mobile subscribers are increasing worldwide (Yonus et al., 2003). Mobile phones have become one of the most usable devices in our day to day life (Bandoy-padhyay, 2002). Savoie and Rajsinhani (1999), argue that these devices have created a completely changed environment of communication and interaction. By 2007 the total worldwide wireless population will exceed two billion subscribers (Figure\textsuperscript{1}

\textsuperscript{1}Source: http://www.geekzone.co.nz/content.asp?contentid=1245
1.1. According to Lembke (2002), the new environment has become more competitive, with the spotlight now on marketing, software and applications, a move toward internet enabled and wireless enabled technology and services from traditional telecommunications, over all from regional toward global market. Rapidly growing telecommunication and computer technology sectors have changed the marketers world also (Balasubramanian et al., 2002). Dickinger et al., (2003) argue that these technological changes enable marketers to interact with their customers in more rapid and easier ways. Haghirian et al., (2005) state that, the users of the mobile phone can receive digital photograph, moving video images and high quality audio from their hand sets. So the mobile phone opens up a new dimension for the marketer to build strong customer relationship by providing the customers with their desired information through mobile phones.

m-Advertising: According to Haghirian et al., (2005) “m-advertising is the transmission of advertising messages via mobile devices such as mobile phone” (p. 2). Reyck et al., refers before sending advertising message, identifying the right customer is a benefit that is helpful in increasing the volume of advertisement response. Haghirian et al., (2003), also define m- advertising as wireless advertising. According to Yonus et al., (2003) mobile advertising includes marketing activities which deliver advertisements to mobile devices by using wireless network to promote goods and services and for creating brand awareness. He also mentions that m-advertising is flexible, dynamic and highly targeted. And this targeted audience can be searched for information, making enquirers and making purchases at any location (Yonus et al., 2003). The two main characteristics of mobile advertising are:

- Personalization: According to Lee and Benbasat (2003), as the mobile device carries the users assigned identity so; it provides potential for personalization. And the marketer can use the feedback for customizing their message and can collect the information about the customer preferences (Stewart and Pavlou, 2002).
• Interactivity: As through mobile advertising marketer can get the instant and
direct feedback from the consumer, so it increases the possibility of interaction
(Haghirian et al., 2005).

Usually in m-advertising, messages are transmitted via short message service (SMS)
(Reyck et al., 2003). It is generally assumed that the growing technology will enable
the consumer to accomplish equivalent use of mobile features with those of desktop
computers in future (Lee and Benbasat, 2003). Varshney and Vetter (2002) argue that,
in the future, more wireless bandwidth will enable the marketer to provide content rich
advertising involving audio, pictures and video clips.

m-advertising present both the new opportunities and also challenges for the marketers
by providing the opportunity of addressing the customers directly and individually
(Haghirian et al., 2005). Stewart and Pavlou (2002) refer, for advertising the products
and services the modern advertisers are gradually more depending on various interac-
tive technologies. m-advertising opens up a new dimension for the marketer to send
location specific marketing messages to users when they move toward within range of
a particular location, for example: marketer will be able to promote their services as
hotels, restaurants and even any special offers from a nearby shop or business location
(Harvey, 2001).

Okazaki and Shintaro (2005) state that, the meeting of internet and wireless technolo-
gies produced a revolutionary service a mobile internet in late 1990s. Global mobile
operators will use technological transition from 2G to 3G, and by 2007 the users of wire-
less data applications will exceeded 1.72 billion . Okazaki and Shintaro(2005) also argue
that SMS has become a buzzword in transmitting B2C messages to wireless devices as
 cellular phones. The messaging frame is now being extended to multimedia message ser-
vices (MMS), which combine pictures, video and sound, i-mode, WAP, blue tooth, NFC
(near field communication), web 2.0. Moreover, DoCoMo a Japanese cellular company,
offers a one-stop-solution of mobile internet service on i-mode, which enables users to
engage in multiple tasks in one portal: e-mailing, instant messaging, data search and
internet (ibid). Still little is known about how mobile technologies and applications be
incorporated into marketing activities (Balasubramanian et al., 2002).

Haghirian et al., (2005), argue, though m-advertising is expanding the opportunities for
marketers but the potential customers are not getting any scope to indicate their likes
and dislikes with this type of marketing activities via mobile phone. He also added
that as mobile phone is very personal device therefore customers want all the services
according to their need and preferences. This situation creates a high risk for the
marketer (Robins, 2003). Haghirian et al., (2005) say, as marketers are unsure about
the customers opinion toward these marketing activities so, it creates high risk for the marketers. Moreover, in contrast to internet-based advertising, the effects of mobile advertising have not been investigated sufficiently (ibid).

Yonus et al., (2003) and Dickinger et al., (2004) state that two approaches are used in sending mobile advertisements, namely the PUSH approach and PULL approach. Push advertising provides unsolicited messages, usually via an SMS alert. Pull advertising usually provides free information such as traffic reports, weather forecasts, ability to brows content the customer has requested. Yonus et al., (2003), also state that, most users consider the mobile advertisings that is pushed to their cell phones as disturbing and annoying. Dickinger et al., (2004) further recognize that success factors such as the use of m- ads, those factors are, content of the m- ad, time of transmission, personalization and consumer control, permission, and privacy. According to Barwise et al., (2002), it is a real challenge for advertisers to produce such text advertises those are at a time entertaining, eye catching, relevant and effective, without repeating the same execution twice.

1.3 Research purpose and Research Questions

Based on the problem discussion above, the purpose of this study is to provide a better understanding on how mobile advertising can be utilized in B2C marketing.

For accomplishing the purpose of this research the topic mobile advertising is further divided in three components, those are: mobile advertising applications, mobile advertising enabling technology and mobile advertisement success factors. On the basis of these components three research questions has been drawn. Research questions are stated bellow:

R.Q.1: How can applications of mobile advertising be described?

R.Q.2: How can the available technologies used in mobile devices be described?

R.Q.3: How can the success factors of m- advertising be described?

1.4 Outline of the thesis

The following figure presents the out line of this study. This study starts with chapter introduction, which include problem discussion, research purpose and research questions. The second chapter is literature review that includes all related theories about mobile
advertising applications, enabling technologies and mobile advertising success factors. The third chapter presents all the selected theories for this study and also presents emerged frame of reference of this study. The fourth chapter presents all the methodology those are followed by this study and the fifth chapter presents all the data, primary as well as secondary, that has been used by this study. In chapter six data analysis has been presented and chapter seven presents all the findings of this study.

Figure 1.2: Outline of Thesis.
Chapter 2

Literature Review

The previous chapter presents the background and problem discussion of the area of this thesis, leading to research questions. This chapter will give an overview of the literature related to each of the research questions. The chapter will start by further looking into theories regarding different applications of m-commerce, short definition of m-advertising, the applications of m-advertising, describing different technologies those are enabling m-ad, and ends with theories regarding different success factors of m-advertising.

2.1 m-Advertising

m-advertising is one of the important applications of m-commerce (Varshney and Vetter, 2002). Using demographic information collected by wireless service providers and the information on the current location of mobile users, much targeted advertising can be done. The advertising messages can be very user-specific based on information provided by the user at an earlier stage or by the history of users purchasing habits. The advertisements sent to a user can also be location-sensitive to inform a user about various on-going specials (shops, malls, and restaurants) in surrounding areas as shown in figure 2.1. This type of advertising can be performed using short messaging service (SMS) or by using short paging messages to mobile users. As more wireless bandwidth becomes available, content rich advertising involving audio, pictures and video clips can be produced for individual users with specific needs, interests, and application.

\footnote{Source: Varshney and Vetter (2002), p. 187}
2.2 Different applications of m-advertising

Mobile phones are free from traditional land-based internet connections, strengthen main point of view of e-commerce, location independence and ubiquity (Balsubramanian et al., 2002). Moreover, Barwise et al. (2002) state that, with the other form of digital marketing mobile media integrate interactivity by allowing for one-to-one, many-to-many and mass communication models. According to Dickinger et al. (2004) mobile advertising integrates very easily into media mix. And it is a two way information flow, like sending and receiving messages, which improve services and feedback between companies and customers. They also state, in comparison with the campaign via other media the response rate in mobile campaign is higher. Dickinger et al. (2004) refer some applications of mobile advertising. They are as follows:

2.2.1 Mobile Couponing

Mobile use of coupons is a kind of SMS marketing that customer receives on their mobile phone in the shape of bar code message. One object is, provide discount to the customers during shopping (Dickinger et al., 2005). Basically it is a latest kind of one to one marketing so we can say that one to one marketing gateway is changing communication system day-by-day and mobile coupon systems are getting popularity as an attractive tool for new generation. A person who have mobile phone can go anywhere for shopping but when he will receive a mobile coupon (SMS) about a product or for different product from the shopping mall or from the specific store then he will prefer to visit that store from where he received this SMS in the shape of virtual voucher because
this is a discount voucher for shopping that he received on his mobile phone. Basically it is called a Mobile Coupon system that is one of the attractive tools of one to one marketing (www.dimoco.at.)

According to the companies point of view if we go in the depth of this mobile couponing system we can understand that the purpose of this system is usage of SMS for creating the relation with customer for sale promotion purpose (Dickinger et al., 2005).

Traditional coupon and mobile coupon have little bit difference, traditional coupon can be printed on a paper but mobile coupon will be in your mobile phone. This electronic/mobile coupons can use for different kinds of offer like discount on shopping, special offer on special products or any other offer. These kinds of coupon can be expiring at the ending date but its depending on companies marketing strategy. (www.mobiledigit.com). Mobile coupon based on bar code system, machine will read it and then identify the validity of the coupon. Anyone can get these kinds of coupon on his mobile phone but it is necessary that you must be register for receiving these kinds of SMS. These coupons are only valid on those shopping counter from where was sent, its mean you cannot use it at anyone store. Figure 2.2 shows how a mobile coupon is workable from database marketing to cash counter.

2.2.2 Information Services

Information services mean if you want to get any kind of information through mobile phone then now there is no problem, mobile is in your hand mean world is in your hand. So you can get information directly from your side with typing the specific code or a company can send you it, according to your schedule. Its mean a mobile user can attach with different kind of information through mobile phone like he want to read or listen latest news, knowledge about weather, market rates or share rates, horoscopes, songs and lot of other things (Dickinger et al., 2005).

A customer can download this information easily without any problem. Both sides it is beneficial, from the customer point of view and advertising company point of view.

\[\text{Figure 2.2: An overview of mobile couponing.}\]
Simply, customer can get required information and company can maintain its advertising strategy through this service (www.dimoco.at). For example customer want to know about weather and suppose weather code is *112*, after it he can see weather news and at the end of this news something is “sponsor by ICA”. In this weather message customer has been understand about the weather and ICA has been done its advertising through SMS marketing.

These kinds of mobile services are not to much expensive or sometime its almost free. There is just need that you register your mobile number for specific information and then you can receive this information through database communication system in the shape of SMS or MMS and these kinds of database system design for the purpose of providing information to the customer and fulfilling the database marketing needs (Dickinger et al., 2005).

### 2.2.3 Mobile CRM

Customer relationship management is “a process that addresses all aspects of identifying customers, creating customer knowledge, building customer relationships, and shaping their perceptions of the organization and its products” (Peelen, 2005, p. 4).

Companies are using different way for creating and maintaining relations with customers. These all ways based on CRM Strategy. In this strategy companies decide that what tool they will use for achieving CRM goals, Mobile CRM is one of them. The object of CRM strategy is “provide direction to each department or employee that maintains contact with customers” (Peelen, 2005, p. 6).

In this century companies are focusing on Customer relationship management for creating long term relations with them. For this purpose they are using different channel for fulfilling CRM needs, mobile CRM is one of them. The object of mobile CRM is, focusing on the customer needs and providing them satisfaction with this device www.dimoco.at.

Two mobile facilities SMS and MMS are playing an important role in handling customer relationship matters. When a customer join Mobile CRM network then companies send them different kinds of messages like pictures, ring tones, discount, special offers bonus points, coupons and many others services. In different countries mobile companies working on different CRM projects like someone companies are planning to send different offers to prepaid mobile connection holder e.g. low price balance recharge for those customers who have no sufficient balance in his mobile phone (Dickinger et al., 2005).
2.2.4 Branding

Branding can be defined as “A name, symbol, design, or some combination which identifies the product of a particular or organization as having a substantial, differentiated advantage” (Betts, 1994, p. 18.). Ginden (1993) states that, a consumer can get a positive image of the product while using a particular brand. Furthermore Montgomery and Wernerfelt (1992) argue that, “While buying something that the consumers know little about brands can even reduce the risk consumer faces” (p. 32). Ginden (1993) also says that to many a brand suggests the best choice and organizations develop brands to attract and keep customers by promoting value, image, prestige, or lifestyle. For building a successful relation with lot of advantage brand is considered as a technique by playing on the nature of human beings (Rooney, 1995). The main object of branding is essentially to build product image in the eye of customers (Cleary, 1981).

As through mobile advertising firms are getting a scope for involving in one-to-one dialog thats why firms are using much greater degree of mobile advertising campaign than other direct marketing channels to attract customer attention and for producing customer responses (Kavassalis and Spiropoulou, 2003). Barwise et al., (2002) refer a survey that were using popular brands trial mobile advertising, the result shows 84 percent of 500 young British adults likely to counsel the service to their friends and only 7 percent are likely to abandon the service.

Dickinger et al., (2003), define mobile marketing as branding tool. For gaining competitive advantages beyond utilitarian differences branding efforts have attempted to tie images and emotions with brand over a century. Clifton (2002) considers brand as the companys most stable asset. According to Barwise et al., (2002), in virtual world trusted brands are more important where they influence online purchase and generate customer loyalty.

For example: a leading seller of hair cosmetics and fragrances in over 150 countries, Wella carried out a campaign which sent all their clients (who are willing receive message form Wella) a message with a kiss. Their customers liked the campaign so much and forwarded the message to their clients. As a result of this viral impact the company gained a high effect for a low cost (Godin and Gladwel, 2001). Wella paid only for those messages that they sent to their clients but pay nothing for those messages which passed to friends (12Snap, 2001).
2.2.5 Entertainment

According to Ahonen (2002), mobile phone can be used as a very successful device for providing entertainment services. Because by the help of this device marketer can provide their services at any place any time, whether the customer is in bus stop, air port, standing in line, waiting for a friend or even setting in a taxicab. Entertainment services include games, jokes, horoscopes, puzzles, cartoons, music, even sport scores. The music industries are looking for the chances to have music streaming and downloading directly through the mobile phone (ibid).

For increasing customer loyalty entertainment services can play a role and also add value for customers, stated by Dicinger et al., (2003). One mobile marketing expert noted, most people have natural playfulness thats why providing games and prizes via text messaging yield high participation (ibid). It has become a fun way to keep customer and attract them by sending games and prizes to the customers cell phone (ibid).

For example: in Germany Warner Brothers Movie World invited their customers for sending a particular message to three of their friends, asking them to forward the message to Warner Brothers as early as possible. The company then offers free tickets of Warner Brothers Movie World Entertainment Park to the first five teams who have completed the cycle of message sending (Dicinger et al., 2003).

Furthermore, from a Siemens Survey and Gartner Research it is found that entertainment applications especially appeal to the generation @ segment-young World Wide Web users, those are between 12 to 16 years old (Dicinger et al., 2003). Dicinger et al., (2003), identified in their article that young people are heavy users of SMS services. But there is some ethical issue to consider, like Communication s Law Center in Australia found that a Quarter of young of young people face difficulties in paying their mobile phone bills and frequently end up in debt (ibid).

2.2.6 Product launches

According to Dicinger et al., (2003), mobile advertising provides supports to product launches, mainly services. It is the belief of twelve of fifteen experts that introducing services rather than industrial goods are more beneficial through mobile marketing activities. They also state that, according to all experts wireless advertising succeed only if embedded appropriately in marketing mix.

It is the belief of twelve of fifteen experts that introducing services rather than industrial goods are more beneficial through mobile marketing activities. They also state that, according to all experts wireless advertising succeed only if embedded appropriately in
marketing mix. Furthermore, they mention, three experts from advertising agencies are agreed on the point that image campaign is not possible via SMS, though other four experts who are more experienced in conducting mobile marketing campaigns than those advertising agency experts, were sure to creating and using emotions through this medium (ibid). According to these experts, advanced mobile devices and broadband services will enable multimedia content, which will make the image campaign possible (ibid).

### 2.2.7 Location based services

<table>
<thead>
<tr>
<th>For Media Company</th>
<th>Vindigo offers such a solution that will help the publishers for extending their brands and content to mobile users very easily.</th>
</tr>
</thead>
<tbody>
<tr>
<td>For directory publishers</td>
<td>Vindigo enables directory publishers to parlay their brands and advertising relationships into the wireless arena.</td>
</tr>
<tr>
<td>For Hospitality Providers</td>
<td>With the help of Vindigo, hotels can provide a value added service to their guests by offering branded ads.</td>
</tr>
<tr>
<td>For Real State Firms</td>
<td>Vindigo’s platform can support the entire home search phase of the real estate sales process by integrating location based services with contact management, process tracking and open house scheduling.</td>
</tr>
</tbody>
</table>

Table 2.1: Example of location based mobile advertisement.
Table 2.1 presents some example of location based mobile advertising refered by Yonus \textit{et al.}, (2003). These are example of Vindigo, an award-winning location based service. Vindigo provides their clients the information of the nearest and the best places to eat, shop and play, further more Vindigo soft ware endow people with radar for the world around them (ibid).

According to Klmel and Alexakis (2002), location based services refers those services that utilize knowledge about where a mobile device user is located. This means the user of the mobile phone could be delivered advertisements those are specific to the region where the user is traveling in, for example a user when traveling in a shopping mall or urban area can get a message with all of the local offers (ibid).

Dicinger \textit{et al.}, (2003), states that location based services are highly significant for local advertising, like a mobile phone user might receive a message that provide directions of the nearest restaurant or train station. They also refer that companies can send advertisements to the clients who are registered and at that particular time when clients are passing to the purchase point. Furthermore they illustrate two experts opinion who are using location based services, pointed out that, location based service is a time sensitive service, thats why clients should receive the message when in front of the shop but not half an hour later (ibid).

2.3 Mobile advertising enabling technologies

According to Hung \textit{et al.}, (2003) by the help of technology mobile commerce is delivering its products and services to customers by defeating the barriers of time and space. Kronsteiner \textit{et al.}, (2005) state, the rapid changes in technology has opened a new dimension for making the m-commerce applications possible. This section will introduce the technology those provide support to mobile advertising.

2.3.1 SMS

Simple Messaging System (SMS) is one of the most popular technologies in mobile communication system that is workable between cellular phone. Generally, sender send small message to the receiver(Kalakota and Robinson, 2002).Figure 4 2.3 depicts the minimum functionalities involved in SMS. In the year of 2002, 580 million users use this service and sent 431 million messages. It is a usability of SMS that can tell us the importance of this technology (TTI, Mobile Messaging 2003). In the first quarter of 2004 mobile

\footnotesize{\textsuperscript{3}Source: http://vindigo.com/products/applications.html} \hfill \textsuperscript{4}Source: Adapted from: http://communication.howstuffworks.com/sms.htm
user sent 135 billion messages (Regional Cellular Statistics, 2004) and it is prediction from the researcher that in 2008 approximately 1.67 billion users will use the mobile (TTI, Mobile Messaging 2004). Usage of this technology is not only popular in elder people, children are also interested in it, now teenagers are also sending million SMS to their friends, parents and teacher. It is a platform that is helpful in understanding their habits (May, 2001). Now SMS is not only using for personal purpose, advertising companies are also using it for achieving the targets. (Heinonen and Strandvik, 2004).

![Figure 2.3: How SMS works between sender and receiver cell phone.](image)

One of the big reasons of its popularity is, SMS is cheap and easy to convey text words from one mobile to another (Kalakota and Robinson, 2002) and its faster than email (Easton, 2002). In some countries sending advertising SMS is an illegal work until receiver will not give permission because receiver dont like to receive spam or unnecessary messages (Easton, 2002). Normally a SMS has 160 character capacities; so an advertising company cannot send more than 160 characters through SMS. But now some new mobile phones have option that reader can read more than 160 characters in one SMS. Advertising companies must be careful about it before sending message (Easton, 2002).

### 2.3.2 MMS

Different messages technologies like SMS and MMS design and develop according to market need and requirements and Multimedia Message Service (MMS) allow to the mobile user to exchange and share multimedia messages (SMS) was available with 160 character limitation (Bodic, 2005).
MMS give the new turning way of SMS with latest features like picture, voice and video messaging, this impact increase usability of this technology. In the starting period of this technology it creates some confusion between people as other technology also create in starting period but after a few period mobile users and advertising companies understand its importance in different matters like sending or receiving picture or multimedia voice messages (Dickinger et al., 2004).

MMS technology is only workable on those phones that have the ability of its usability, its mean other phone is not workable properly for this technology. MMS is not only using in person to person messaging, it is also using in content to person messaging purpose. Value-Added Service providers (VAS) are working behind content to person messaging. The VAS application can be use to MMS for different purpose like weather notifications, news updates, entertainment services, location-based information, goal alerts, and so on. They can send these applications according to the customer request and need; it could be daily base, weekly, monthly or on the occurrence of specific events (Bodic, 2005).

### 2.3.3 Bluetooth

Bluetooth technology can be use for communication; this is possible between two mobile phones or any two or more than two devices that can create Bluetooth network. Maximum 8 Bluetooth devices can be attach at same time. Bluetooth work under radio signal system with 2.4GHz frequency power. Bluetooth can be work under standard distance that is round about 10 meters but it is increaseable that time when we use booster to increase its signal power capacity. With the help of booster component we can extended its distance almost 100 meter or more than it and then transmission rate will be round about 725 kbps (May, 2001).

Bluetooth was first time launched in 1999 at the Christmas and in 2000 Ericsson first time launch wire free head set for mobile devices with uses of Bluetooth technology (Paul May, 2001). With the help of this technology advertising companies can create PANs (personal Area Networks) for advertising or other official purpose that used inside the office for communication purpose. Behind this technology frequency hop synchronization (FHS) packets work for communication purpose Whenever any Bluetooth device will enter in the PANs it will connect with this network and FHS packets system will be activate but the connectivity with this network is temporary, whenever a device holder will move outside the range of this network the connectivity will be stop (Kalakota and Robinson, 2002).

Before Bluetooth, infrared/IrDA was popular in different devices but its usability was decrease due to requires line of sight at a particular angle to work effectively but in
Bluetooth matter this kind of specification is not necessary even you can take print out by the printer that is outside of your office. The basic object of this technology is, remove the jungle of cables that is use for connecting two or more than two devices like TV, video and digital camera, speaker, printer and any other device that have bluetooth facility. In the peer to peer network that is normally created under Bluetooth technology, people can transfer our data between them (Easton, 2002).

2.3.4 WAP

WAP stands for Wireless application protocol, which is one of the most popular mobile commerce protocols. An organization called WAP Forum formed in 1997, which aimed to develop technologies that will bring the wireless world and the internet closer. And this technological development called WAP now enables the wireless users use internet content and information system via mobile phone (Hung et al., 2003). According to Teo and Pok (2003), WAP combines two of the hottest innovation in recent times and portability of mobile phone enables the WAP users to access internet service anywhere, anyplace. WAP applications include receiving and sending email, paying bills, mobile banking, infotainment as weather forecasts, traffic updates, news, internet browsing, stock checking, location based services and so on (Hung et al., 2003). Slow internet connection speed and high service cost are recognized as major limitations of WAP (ibid).

2.3.5 i-Mode

i-mode is a mobile phone service that provides internet access to mobile phone, as a result of which people can check emails, do shopping, banking, games and even can watch the real time news from their mobile phones. The i of i-Mode refers internet, information, interaction and I, myself. This service was first introduced in Japan, by one of their leading cellular phone operator NTT DoCoMo in February 1999. In 2003 Japan had almost 63 million mobile internet users, among which nearly 60% were using i-mode service. I-mode services include email, downloading ring tones, entertainment, games, horoscopes, transportation schedules, banking, data searches; news updates (Stuart and Huff, 2003). More over extended menu of i-mode, i-area includes various location based services, such as weather news, restaurant guide, local hotel information, zoomable maps with an address finder function, traffic updates and estimation of travel times. I-mode subscribers can send email or message that contains up to 500 characters in comparison to 160 characters of SMS service (Okazaki and Shintaro, 2005). I-mode is the best non-WAP solution (Saha et al., 2001). Yonus et al., (2003) state the billing system of i-mode
users in Japan differ from the typical web service. In web service user is charged based on the user connection time to a web site or service, but in i-mode user pay their bills based on the volume of data transmitted (ibid). I-mode has become an encouraging business model for European mobile players for its smart pricing, easy billing system and software content (Okazaki and Shintaro, 2005).

2.3.6 3G

According to Robins (2003) states 3G technology as digital super highway that offering the users a common digital foundation for all their entertainment, communication and information. Kronsteiner et al., (2005), refers 3G as hope for the users and challenges for operators and service providers. 3G was first launched in Japan by the cellular company NTT DoCoMo in 1st October 2001 (Robins, 2003). Before 3G there are some other technologies those are already exist in market, like 1G, 2G and 21/2 G. 1G technology give the support primarily for voice, but it was less secure and it provides support for low bit rate of data (Varshney and Vetter, 2007). And the “i-mode” enables 2G users to access the internet by their mobile phone. Then the new technology emerged in market called General Packet Radio Service (GPRS) which is also called 21/2 G, enabling the users “always-on” internet connection and more faster than 2G (McCartetney, 2001). 3G is up to 40 times faster than the previous 2G technology, claimed by equipment manufacturers, and equivalent to upgrading from a bicycle to a racing car (Grayson, 2001). 3G enables the users receive digitals photographs, moving video images and high quality sound video downloads from their handsets, capable of special ring tones, games, music, TV, cameras and also voice recognition features (Varshney and Vetter, 2007). Corporate users can be connected to office computer networks, access and send files, receive and send email up to 5000 characters rather than 400 characters by i-mode connection (Robins, 2003). More over for business users will have some services as industrial design and product positioning services (Parks, 2001). According to Teo and Pok (2005), 3G will facilitate the internet access speed in mobile phone via WAP also (as WAP enabled devices is blamed for its slow internet access speed Japan and South Korea are in worlds leading position in using 3G wireless network and as a report in 2006 it was found that almost 50% of mobile subscribers are using 3G in Japan (Dekleva et al., 2007).

2.3.7 NFC

NFC stands for near field communication which is the extension of Radio Frequency Identification (RFID) technology. NFC will solve the problem like difficult configuration,
long duration of connection establishment and high power consumption. NFC combines the advantage of RFID technology and also able to establish two-way communication. This technology was issued in 2003 for short range data communication within frequency band of 13.56 MHz. NFC suits the requirement of physical data interaction very well. This technology is expected to support various applications in future as mobile payment, ticketing and peer-to-peer data exchange. Paris has already used NFC enabled mobile phone in public transport for ticketing in 2006. NFC also provides possibility to enhance connection like Bluetooth. For better understanding NFC functionality an example is given with the possible uses of this technology: a person while walking along a road notice a movie poster. He scans the NFC logo on the poster ith his mobile phone and retrieves additional information about the movie and the actors. Finally he buys a ticket of the movie with his mobile phone, paying with his phone bill. He then enters the cinema by waving his phone in front of the cines turnstile. During the movie he buys a drink at a beverage machine by paying again with his phone. And after the show he sees an advertisement of a taxi company. He scans the NFC logo in the poster and calls the taxi to the cinema by confirming a message on the phones display. Most companies are agreed now on the greatest potential of this technology for ticketing, mobile payment and authentication (Falke et al., 2007).

2.4 Mobe advertising success factors

Dikinger et al., (2004) has recognized four different factors of mobile advertising as success factors. He states that, these factors have direct impact on the success of mobile advertising. This section will introduce those factors that are significant for the success of mobile advertising.

2.4.1 Content

According to Ducoffe (1996), advertising messages are those which build up a communication between advertisers and consumers. Barwise et al., (2002), argues that, the message needs to have certain attributes, like it should be entertaining, eye catching, relevant and understandable by the recipients but not irritating. Haghirian et al., (2004), states characteristics of message content, those are as follows:

- Entertainment: Enjoyment of recipients that is connected with advertisement play the greatest role in the measurement of the overall attitude toward that is a very crucial for m- advertising also. Dickinger et al., (2004), state that entertainment
services can traditional advertising largely associated with the entertainment of advertising.

• Informativeness: According to Robins (2003) recipients of mobile advertisement want that the content of the mobile services to be modified to their interest. And more over customers are interested in getting thus consider information is every important enticement for m-advertising, as the recipient reacts very informativeness of advertising also play a strong role even in traditional media vehicles. More over indirect influence on measures of advertising effectiveness.

• Irritation: According to Shavitt et al., (1998), if people feel indignity when addressed by advertisements, has a great influence on peoples attitudes toward advertisements. Ducoffe (1996), refers consumer will have an unwanted and irritating attitude toward those advertisements. Pavlou and Stwart, (2002) state that some times m-advertising can provide such information that can confuse and divert consumer in wrong direction, those create negative influence in consumer mind.

• Credibility: According to Brackett and Carr, (2001) in advertising value of web advertising, credibility is highly relevant. Mckenzie and Lutz, (1989), define advertising credibility as consumer Stwart, (2002), refer it as “predictability and fulfillment” of implicit and explicit requirements of an the advertising value to customer.

2.4.2 Time of transmission

According to Dickenger et al., (2005), companies must be design the time frame neither for sending messages to the customer because in the free time people like that kind of activates nor in office or business activities. Some companies like to send messages in the weekend between 9:30 to 17:30 because they know the importance of communication time. In the student matters, messages sending strategy is different because if they will receive messages during classes it can create problem to the both sides thats why mostly companies send their messages in the night but not late night.

If we go in the further detail we can understand it was according to the Merriam-Webster Dictionary (2003) advertising is defined as follows: Advertising is the action of calling something to the attention of the mouncements. Its mean customer attention is necessary against advertising and it is only possible that time when message reader is free. Sometime they can ignore these kinds of advertising messages during other activities so in the advertising matter real time of transmission is also necessary (www.merriam-webster.com).
Basically there are two main categories in the mobile advertising pull and push advertising (Barnes, 2002). There is no problem in pull advertising because it based on customer request but in the push advertising strategy companies must be careful about time of transmission because sometime it can disturb the customers other activities. It is argue of the Dickenger et al., (2004 ), that The advertiser

must have permission before sending advertisements to consumers, if we go in the depth of these words we can understand that advertising companies can also get opinion from the customer side like which time they are free for receiving advertising messages through mobile phone.

2.4.3 Personalization

On the Web, personalization means returning a page that has been customized for the user, taking into consideration that person’s habits and preferences. The personalization may be done by the user, the Web site or both and may be aimed at the general public or company employees (www.answers.com). The advantage of this personalization is, a person can see product or services according to his personalization that has been save in the company database. It is one of the basic rules of one to one or direct marketing that database must be design according to customer personalization and in the customer relationship management strategy companies focus on the customers profile that have been filled from the customer and save in the companys database(Peelen, 2005).

From the companys side a structured and well-maintained preserve database is essential and important for targeting customers effectively. Before starting mobile advertising campaign every company must know about clients personal information e.g. their habits, interest and preference. These are essential part to build a client database and it is also responsibilities from the companys side that they disclose customers personal information (Barwise et al., 2002). Many customers dont like to share their personal information but mostly it depends on the companys reputation. In this matter customer confidence is also essential (Dickinger et al., 2004).

A person may use a mobile device to receive information but also for a purpose of personal entertainment, it mean if any matter (mobile SMS/Advertising) will disturb his personal entertainment then he will never like to disclose his personal information (Thtinen, 2005).
2.4.4 Consumer control, permission and privacy

According to Barwise et al., (2002) permission of consumer is very essential factor in mobile advertising. He also refers that permission based advertising reduce the possibility of spamming, that annoy the consumer and for which customer sometimes delete messages without reading and which may create a negative attitude toward a brand. Petty et al., (2000) states that, both consumer and company can be benefited by permission based advertising. With this type of marketing customer will get more and more relevant advertisements to their interests and at the same time company will gain positive attitude of customer toward them (ibid). Dickinger et al., (2004) refer one important aspect of m-advertising that is, how a customer can stop receiving company messages. And simple registration process can help to gain permission from consumer (Golem, 2002).
Chapter 3

Conceptual Framework

This chapter will present the emerged conceptual framework of the literature presented in previous chapter. And the structure of this chapter will reflect the literature review and each research question will be presented here by turn.

3.1 Conceptualization

According to Miles and Huberman (1994), the main things that will be studied in research will be explained in conceptualization either graphically or narrative manner. So, the theories those are most applicable for collecting data of each research question, will be chosen in this chapter from theories presented in literature review chapter. The theories will be selected on the basis of their connectivity with the topics of the research questions. The conceptualization of our research is presented bellow:

3.1.1 How can applications of mobile advertising be described?

This first research question aims to investigate how the applications of mobile advertising can be described. For the fulfillment of this question and for collecting data, the theory of Dickinger et al., (2004) will be investigated. Along with this theory some concepts of Kavassalis and Spyropoulou (2003), Yonus et al., (2003), Dickinger et al., (2003) will also be investigated, because these concepts provide strong support to the theory of Dickinger et al., (2004). These theories are chosen here because these are more extensive for the area. Dickinger et al., (2004), have listed seven different applications of mobile advertising, those are given bellow:
Chapter 3. Conceptual Framework

- **Mobile couponing:** Dickinger et al., (2004) also identified mobile couponing as a useful way of mobile advertising and it is gaining popularity day by day.

- **Information services:** By supporting Dickinger et al., (2003, 2004) states that mobile advertising is also a good source of information services.

- **Mobile CRM:** Dickinger et al., (2004) also state that m-advertising is very useful for establishing strong customer relationship.

- **Branding:** Dickinger et al., (2004), Kavassalis and Spyropoulou (2003) refers that mobile advertising is highly applicable for creating brand awareness and the firms are now using greater degree of m-advertising than other direct marketing channels.

- **Entertainment:** According to Dickinger et al., (2004), entertainment services increase customer loyalty and m-advertising are a good source of entertainment.

- **Product launch:** Dickinger et al., (2004) state that mobile advertising provides supports to product launch, especially services.

- **Location based services:** Dickinger et al., (2004), Yonus et al., (2003), say that location based services are highly significant for mobile advertising.

These applications will be investigated to find whether customers are agreed with the theories or not, what are the opinions of the customers about these applications, which applications they think as more important.

### 3.1.2 How can the mobile advertising enabling technologies be described?

This research question aims to investigate how the m-advertising enabling technologies be described. To reach this purpose all the mobile enabling technologies presented in literature review are included in conceptual frame work. Because all these technologies are important for mobile advertising, like SMS, MMS, Bluetooth are used for advertisement sending, and WAP, i-Mode, 3G, NFC are providing support for sending mobile advertisement. So, all these technologies are considered as important for mobile advertising by this study. Those technologies are listed bellow:


- **MMS (Multimedia Messaging Service):** Bodic, 2005; Dickinger et al., 2004.

- **Bluetooth:** May, 2001; Easton, 2002; Kalakota and Robinson, 2002.
Chapter 3. Conceptual Framework

- i-Mode: Stuart et al., 2003; Okazaki and Shintaro, 2005.
- NFC (Near Field Communication): Falke et al., 2007.

This research question will investigate which technologies are more prominent for m-advertising and which technologies will enable m-advertising to present in more effective and personalized manner.

3.1.3 How can the success factors of m-advertising be described?

This question aims to investigate how the success factors of m-advertising be described. For fulfilling this purpose and for data collection some factors those are mentioned as success factors for m-advertising by Dickinger et al., (2004) will be considered here. Beside this theory concepts of Yonus et al., (2003), Ducoffe et al., Varsheney and Vetter (2002) and Pavlou and Stewart (2002), will be studied here; as all these concepts provide strong support to the theory of Dickinger et al., (2004). Those factors are given bellow:

- **Content:**
  - Entertainment: Dickinger et al., 2004, Yonus et al., 2003 and Ducoffe et al. (1996) mention that for the content of m-advertising message entertainment is very crucial.
  - Irritation: According to Pavlou and Stewart (2002), m-advertising those confuse customers can produce negative influence about a company or a brand in customer mind.
  - Credibility: Pavlou and Stewart (2002), also mention that credibility can produce positive influence about the product or company in customer mind.

- **Time of transmission:** Dickinger et al., (2003,2004), mention that, in success of m-advertising time of transmission play an important role, and if the advertisement send in wrong time (ex: when one is in the class or meeting) can gain bad impression about the brand and also the company.
• **Personalization**: Barwise *et al.*, (2002) and Dickinger *et al.*, (2004), mention that personalization is also a crucial factor in m-advertising as mobile phone is a very personal device.

• **Consumer control, permission and privacy**: Barwise *et al.*, (2002) and Petty (2000) state that both the company and customer can be benefited from permission based m-advertising. And Dickinger *et al.*, 2004, mention that, how a customer can stop receiving message is one important aspect of m-advertising.

This theory is chosen here because these are more relevant with our research area. This question will investigate how much these factors are applicable to customers, what the customers thinks about these factors and what factors are more important to them and why.

### 3.2 Emerged frame of reference

Figure 3.1 presents the emerged frame of reference based on the conceptual frame work and three research questions. According to the selected theories in conceptual frame work it is found that m-ad applications include: mobile couponing, information services, mobile CRM, branding, entertainment, product launch and location based services, mobile enabling technologies include SMS, MMS, Bluetooth, WAP, i-Mode, 3G and NFC, and mobile advertising success factors include mobile advertisement content, time of transmission, personalization and customer permission, control and privacy. After data collection and analysis this study will try to find out how these three components of mobile advertising combine together to accomplish the purpose of the research.

![Figure 3.1: Emerged frame of reference of mobile advertising.](image-url)
Chapter 4

Methodology

This chapter will focus on research methodology and we will present that which type of research is suitable according to our selected topic. This chapter will introduce the way that wills focus on, how we get the information from different ways and what type of research we selected. The starting point of this chapter is, Research Purpose and it will carry on with the next topics; research approach, research strategy and the other sections of this chapter are data collection, sample selection, analysis method, and the quality criteria.

4.1 Research purpose: Exploratory, Primarily descriptive and explanatory

According to Yin (1994) research purpose means why we are doing research in the selected area, what is our object, highlight the problem and work on it. And furthermore, he classified research purpose in three different types, those are: exploratory, descriptive and explanatory research purpose. According to Saunder et al., (2005), exploratory research is used to explain the understanding about a topic, or to investigate any situation for making a new direction, asks questions and bring out the problem in new light.

Descriptive research is defined by Saunder et al., (2005), as to portray an accurate profile of persons, events or situation. More over it is essential to have a clear description of the event before starting data collection (ibid). According to Yin (1994), descriptive research is generally used in such a study that is well structured and not intended to find out any cause effect relationship among different variables. In other hand, any study that defines cause and effect relationship among variables that can be considered as explanatory research, stated by Saunder et al., (2005).
The purpose of this research is exploratory, primarily descriptive and little bit explanatory. Because this research is dealing with a new topic-mobile advertising; moreover, this study is explaining the current situation of mobile advertising and is trying to find out the new insights of the topic. Furthermore, the purpose of this research is to developing better understanding about the utilization of mobile advertising. So, this is an exploratory research. This research is considered as primarily descriptive as the data has been collected and analyzed in this research. Finally, this research is little bit explanatory as the answer of the research question is given in the last chapter and conclusions are drawn also for the overall research purpose.

4.2 Research approach: Qualitative

Different types of research approaches are exist for doing research work. Here we will describe the reasons for which we have selected particular research approaches for conducting our research project. According to Yin (1994), qualitative approach emphasis is given to description and discovery based on data in the form of words rather than numbers. Qualitative methods of research are normally focused on case studies and the object is to identify the research problem (ibid). Miles and Huberman (1994) state that, While working in a certain location qualitative data is a resource of well-ground, rich description and a good explanation of a process.

Moreover, according to Holm and Solvang (1995) a qualitative method help the researcher to gain a deeper and more clear understanding of a particular area of research. And Yin (1994) argues that the appropriate selection of a research approach depends on the research purpose and the research questions.

As the purpose of this study is to gain a better understanding about the utilization of mobile advertising in B2C marketing, so the qualitative approach is found to be the most appropriate approach of this study. Because qualitative approach helps to gain deeper and better understanding in particular research area.

4.3 Research strategy: Case study

Yin (1994), has stated five different types of research strategies, those are: experiments, surveys, archival analysis, histories and case study. He also referred advantages and disadvantages of each strategy on the basis of three particular conditions. Those are:

- The type of the research questions proposed for the research area.
• The extent of control the researcher has over the behavioral events.

• And the degree of focus of the research on the contemporary events.

Yin (1994) states, case study requires research questions start with how, why questions, focus on contemporary events and the study will not have any control over behavioral events. He also argues that case study is good for qualitative research (ibid). Furthermore, Yin (1994) added in a case study research a researcher intends to find out the connection between the theory and the result of the research. According to Gummesson (2000) case study strategy can be divided in two types: single case study and multiple case study. As referred by Yin (1994), the findings form a multiple case study is considered more robust rather than a single case study and therefore increases the overall validity of the whole research, as multiple case study give the opportunity to make the comparison among different cases. According to Gummesson (2000), case study research provides the opportunity to acquire a holistic view of a certain research area.

Case study is found to be the best solution of this research as the purpose of this study is to gain a better understanding about the utilization of mobile advertising in B2C marketing. Moreover, the research questions of this study starts with how questions and being a qualitative research it doesn’t have control over behavioral events, and this study focuses on contemporary events. For enhancing the validity and reliability of the research area this study deals with multiple cases, one is European case and another one is Asian case.

4.4 Data collection method: Interviews documentation

Interview and documentation will be used as data collection method in this study. Yin (2003), states that interview is one of the most important sources of getting information or data and it is helpful in handling case study matters. Advantage of the interview is, it is target based and its directly concentrates on the case study topic. For drawing conclusion interview play an important role in research development, but poorly constructed questions can also create problem in developing the conclusion (ibid). According to Yin (2003), documentation can be reviewed repeatedly, more over it contains exact name, references and details of an event.

There are three kinds of interview, structured, semi-structured and unstructured (Saunders et al., 2003). For collecting data this study will consider semi structured interview. Because in semi structured interview respondents are asked about their opinion on a particular topic, more over can be asked about his or her own insights about certain
occurrences (Yin 1994), and to gain an in depth understanding about the research topic of mobile advertising this study needs a clear view of the opinion of the respondents. For research question one and three interviews of selected respondents will be considered here, by following an interview guide (appendix A). And for research question two secondary data in form of documentation will be used by this study to gain a deeper understanding about the technologies that facilitate mobile advertising.

4.5 Sample selection: *Purposive*

Non-probability sampling will be used in this research for sample selection. According to Saundere et al., (2003), non-probability sampling is more used in case study research (ibid). As our research strategy is also case study non-probability sampling is more prominent for this research. Purposive sampling will be used by this study within non probability sample for sample selection.

Purposive sampling enables the researcher to choose cases those are most suitable for answering the research questions and fulfill research objective. And more over this type Of sampling is used when sample size is very small as in case study research and if the cases are informative. As referred Saundere et al., (2003) purposive sampling is used when the sample size is small and as the research strategy of this study is case study with informative cases, for this reason, purposive sampling is selected here as sample selection technique. Twelve respondents among students have been selected as samples of this research and furthermore, these samples have been divided in two heterogeneous cases, one is European case and another is Asian case. Moreover, this study has divided each case in two sub groups; each contains three male and three female. Samples have been selected among students because of convenience.

4.6 Data analysis: *Within-case cross-case*

Theoretical proposition will be followed in this research. As stated by Yin (1994), general analytical strategy should be chosen at first in all investigations for identifying what to analyze and why. And theoretical proposition led to case study. Furthermore, this study will use pattern matching technique for analyzing data. Pattern matching is considered as one of the most usable technique for analyzing data in case study approach, which compares empirically based pattern with a predicted pattern (ibid).

Data reduction, data display and conclusion drawing will be followed in this research, as stated by Miles and Huberman (1994), three synchronized flows of activities for analyzing
data are: data reduction, data display and conclusion drawing. This study will also apply within-case and cross-case analysis as stated by each case will be compared against the frame of reference, and by this within-case analysis will be done for data reduction. Then the reduced data of each case will be compared against another case, for cross case analysis. In cross case analysis, this study will first make comparison between the responses of male and female respondents of each case, then the comparison between case one and case two will be made in this study. After this all the findings of the study will be presented in the chapter conclusion. Thus data analysis of this study will be done.

4.7 Validity and reliability

Saunders et al., 2003, defines validity as the extent to which data collection method or methods accurately measure what they were intended to measure. According to Ericsson et al. (1997), validity and reliability are two useful measures while defining the quality of any research. According to Yin (1994), construct validity establish correct operational measures for the concepts those are being studied.

For maintaining the overall quality of data this study use triangulation, by using interviews, observation and more over documentation, as referred by Yin (1994). As source of documentation, several websites related with technologies have been reviewed in this study. For the construct validity as referred by Yin (1994); several steps were followed by this study, as: a letter was sent to the respondents that give them the idea about the overall topic of the interview, which helped to avoid misunderstanding. Moreover, interview guide has been sent to the supervisor of this research, Tim Foster, for proof reading and give comment on it. The findings of this research have been generalized analytically which for enhancing the external validity of this study.

Saunders et al., (2003), defines reliability as the degree to which data collection method or methods will yield consistent findings, similar observations would be made or conclusions reached by other researchers or there is transparency in how sense was made for raw data. This means if any other researcher do the same research by following same method and study same case he or she should get the same udy also provides all the manes and e-mail addresses of the respondents in Appendix B for enhancing the overall reliability of data.

For increasing the reliability of this research, those students were selected for data collection who are familiar with mobile advertising. Moreover, this study also considers the differences between genders, ale. During interview, interrupting has been avoided;
as interruption can create misleading. For increasing the reliability; interviews of the respondents have been recorded; more over extra notes have been taken, for getting a clear perception about their ideas. As referred by Yin (1994), observation that is made by more than one observer is highly reliable. For this reason both the researchers have been presented during interview, and the websites of the technologies have been visited several times, to gain a clear idea and for avoiding misunderstanding about those technologies those are associated with mobile advertising.

4.8 Summary of methodology

Figure 4.1 represents the outline of methodology chapter.

![Methodology Summary](source)

Figure 4.1: Methodology Summary.

\footnote{Source: Adapted from Foster, 1998, p. 81}
Chapter 5

Data Presentation

This chapter presents all the primary and secondary data that has been used for this research. Data presentation starts with the primary data collected for research question one, followed by data collected for research question three. While presenting the data for research question one and three, data collected for case one (Asian case) will be presented first followed by data of case two (European case). Moreover, data collected form male as well as female respondents, will be presented here separately. At the end of this chapter, secondary data that has been used for research question two will be presented.

5.1 Research question 1: Applications of mobile advertising

5.1.1 Asian male

- Mobile couponing: One of the respondent said mobile couponing is good; as it is without paper and almost all people use mobile phone. And other two respondents were saying that it is helpful for reducing companies paper cost, and also reduce risk involve in paper couponing, like: missing of paper coupons. But in this application there is less possibility of missing coupons rather than paper coupons. Moreover, mobile coupons will be always with the customer, and any one doesn't need to carry any extra paper for using mobile coupons. So, the overall views of all three interviewee were, this application is more attractive as it is applicable just with a bar code number.

- Information services: All three interviewee were agreed at this point that mobile advertising is a new way of information providing platform, and it is attractive, fast and easy. Because by mobile advertising people can get the advertisements
at any place and any time. Furthermore, they added, advertising companies also provide their website address with the advertisement. So, people can have all desired information by browsing companies website. One of the respondents was giving example that many times he received information from ICA through SMS that there is his parcel and he can receive it during the following time. So, all three respondents believe that mobile advertising is a good source of information service.

- **Mobile CRM**: One interviewee said that, companies should study about customer need, customer want; if they can have the customers. One interviewee highlight one point that after purchasing any product, companies can collect dont like and in futures what they further want in this product, with it they can know customer desires and can create good relation with them. According to the first two respondents, mobile advertising can also information according to their interest via mobile advertisements, then m-ads can be a way of building find any connection between mobile advertising and mobile CRM.

- **Branding**: All three respondents said that, they would like to receive any advertising from any popular brand. would like to try it. So, all of them thinks that mobile advertising is helpful for creating brand image, because advertisements via mobile phone can draw the attention of people very fast.

- **Entertainment**: During interview one respondent was saying that basically every person likes entertainment and if it is free then almost every person will like it according to their choice. Other one gave example that some is necessary that at the time of providing entertainment services companies should know about their day early in the morning. One interviewee was saying that knowledge about the customers mobile to their customers.

- **Product launch**: One of the respondents think that in present period mobile phone can be used for advertising at should be according to the interest of the customer. Other one was saying that this device can be use for product launch but cannot be fully alternative of other advertising platforms like TV, Radio or internet.

- **Location based services**: The all three respondents think that it is good idea and best for those that want to get information advertising, when they are at the front of shopping center, hotel, bus station or any other related place. to visit those shops that are offering some discount; whether he get the advertising via mobile phone or any other advertising media, it does not matter for him.
5.1.2 Asian female

- **Mobile couponing**: One of our respondents thinks that risk is also involved in sending coupons via mobile advertising, in the users mobile phone. Other one said, if coupon barcode not work during collecting discount then also involve in it. These were points from all three respondents; but overall they were interested in it because in this type of coupons they dont need to save the paper coupons.

- **Information services**: One interviewee said that lot of other information services channels are working around but it is easy One respondent said, before sending these kind information services via mobile phone, companies should that how much user will use this information service. Last respondent was partially agreed with this information provided via other media like: TV, internet.

- **Mobile CRM**: One Asian interviewee highlights that Customer relationship management is essential for present period, It is good change because people always follow the technologies. Other one respondent said that she does not think that mobile advertising can build mobile CRM. The third respondent said that CRM is good a person is busy in the other activities and some company is sending messages again and again about customer mind.

- **Branding**: According to our one interviewee m-advertising can be use for creating brand image, because this time mobile advertising can never stop. So companies can use m-advertising for increasing their brand image and doesnt like to watch TV commercial even it is about popular brand but if she receives some messages through m-advertising she would read it and would like to know the information provided via mobile phones.

- **Entertainment**: Three respondents were interested in mobile entertainment. One respondent said that she likes it One interviewee said that user can enjoy entertainment facility according to their mood and other one explains about mobile specification.

- **Product launch**: One respondent was partially agreed with this application. She said, if the mobile advertisement short message service companies can introduce new products. One gave the example of Pepsi Max new product of Pepsi like Pepsi Max then he or she will like the application. So, mobile advertising can be used as a successful application of product launch.

- **Location based services**: Our one interviewee said that sometimes this service is better and sometime not. It depends on its it then it can disturb her. The respondent provide another example, like one is walking at the front advertising
can be disturbing. So in location base service it is necessary to identify who is right services then she will like it otherwise she will ignore this message. Third one said that the activation and deactivation should be in the users hand.

5.1.3 European male

- **Mobile couponing**: Two of our respondents think that mobile couponing can be a very useful application for people. But if they can get it via mobile phone, then it will be always with them for using and will reduce to receive coupon via mail rather through mobile phone. He thinks mobile phone is a very personal device, privacy.

- **Information services**: One of our respondents thinks that via mobile advertising companies provide very little information from customer by sending m-advertising. Another respondent thinks that, companies are also providing their website address with the mobile advertisement. So, if anyone is interested by a particular advertise, he or she can browse their web site for getting desired information. According to our last or service either via mobile advertising or advertising via other medias, so, he consider mobile day by day, in future this type of advertising will be improved more and more.

- **Mobile CRM**: Our one respondent thinks, if he is a frequent visitor of a particular shop for example: CD store, or some discount, in that case m-advertising can help in building strong customer relationship. Our relationship. More over they think if the advertising is from such a company about which they dont have any interest, it could create negative impact in customer mind.

- **Branding**: According to our one respondent, if he gets any m-advertising from any company that has a famous brand he company or a company that is not so known in market, sends m-advertising many times, then there may be from them and if that product has good quality, then the brand can be known day by day. So, he thinks company is sending m-advertising several times then he will not feel good and sometimes may be disturbed.

- **Entertainment**: Two of our respondents say, if they receive any advertising about any new release songs, or news updates, they will appreciate it very much. While waiting in a bus station or somewhere else, when people dont have horoscope, as they dont have much interest on these topics. Our last respondent likes these types of enjoyment, so he likes it.
• **Product launch**: Three of our respondents are agree in the same point that, a mobile advertising which contains information Otherwise a company will not get any response.

• **Location based services**: About this application our respondents say this is a good application of mobile advertising. But it has the street he is continuously receiving messages that you have a good hotel or restaurant within hundred irritated. They suggest, there should be a particular call number, for example 123, if any one need such service he or she can call in that particular number, and then they can receive such advertisements in their mobile phones. One more thing they suggest, that the calling should be free of cost.

### 5.1.4 European female

• **Mobile couponing**: About the application mobile couponing one of our respondent say that it will be very interesting if one is coupons always with them. So they can use it whenever they need. But in case of paper coupon one has to about mobile advertising; she deletes most of the advertisings she gets. So, it does not any matter whether it also, as she does not like to carry any extra paper while going out.

• **Information services**: Two of our respondents say that, if mobile advertising is compared with the advertisings provided by enough information. But if this application is compared with advertisings provided via internet, then it is gather all the needed information. But it is also true that due to the technological improvement it is also via mobile phone. So, they like m-advertising as information service, because while getting a message from is interested she can browse company website and can have desired information. But according to our third as people can see very attracted, big pictures of product, thus can understand the usability of that particular product.

• **Mobile CRM**: One of the respondents says, mobile advertising can help in building customer relationship. She gave one always when they have any new product or any kind of discounts, she enjoys it very much. So, via these respondents couldnt find any relation between mobile advertising and customer relationship.

• **Branding**: Three of our respondents were agreed in a point that they will like to get any advertisement from a well known branded company. But if the company is unknown then one of the respondent say, she may try for it but others were disagree with her.
• **Entertainment**: Two respondents say that they like such advertisement which offers downloading music, games. And our last source of entertainment. But none of them were interested about horoscope.

• **Product launch**: While talking about this application every respondent say that it will be interesting to know what some idea or hints about what new product or service is going to be launched. If anyone is interested, remain unknown to customer, which they think is not good for a business.

• **Location based services**: One of the respondents says, she always has very well planned tour. Means, before going somewhere is happening in that particular place where she is going. So, she doesn’t think that this type of services so this type of application can be useful for all.

5.2 **Research question 2: Mobile advertising enabling technology**

*Secondary data used for research question two*

- **SMS**: The validity period of this technology is very interesting. Your all messages will store in the SMS center whenever mobile will off and when mobile will turn on then all loose and it will reached at the right destination because after sending the SMS mobile phone will give mobile will turn off then sender will not receive message delivery notification. Then message sender (www.developershome.com).

- **MMS**: Multimedia Message Service is a latest kind of Short Message Service that has removes the messages but it is necessary that his mobile must be support to MMS technology. A multimedia message can usable under MMS technology platform and it is only workable on those phones that have MMS facility. through this technology. (www.gsmworld.com).

- **Bluetooth**: Bluetooth wireless technology is a short-range communications technology intended to security. Every Bluetooth have a standard connectivity with each other Bluetooth devices. to handle data, voice and signal of connectivity at the same time without the restriction of glass, wall voice calls, printing and fax capabilities, and synchronizing PDA, laptop, and mobile phone applications full-duplex signal at the nominal rate of 1600 hops/sec (www.bluetooth.com).

- **3G**: The third generation network offers 2Mbps speeds with the broadband transmission. And 3G is deployment between 2008-2010) the coming technology is 4G
which will allow higher bit rate than 3G, location based services, mobile entertainment services, mobile financial applications, proactive service wireless operators to introduce digital multimedia broad casting, multicast process that means audio 3G technology supports real time voice or chats and also facilitates group messaging; PC people are unable to get any immediate feedback (Sacher and Loudon, 2002). Table 5.1 presents a comparison and the evolution among different wireless network (Dekleva et al., 2007).

Table 5.1: A comparison and evolution of 1G, 2G, 3G and 4G wireless networks

<table>
<thead>
<tr>
<th>The generation</th>
<th>Access Protocol</th>
<th>Key features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st generation (1G)</td>
<td>FDMA:(Frequency Division Multiple Access)</td>
<td>Analog, primarily voice, less secure, support for low bit-rate</td>
</tr>
<tr>
<td>2G and 2.5G</td>
<td>TDMA:(Time division multiple access)</td>
<td>Digital, more secure, voice and data</td>
</tr>
<tr>
<td>CDMA2000</td>
<td>W-CDMA: (Wideband Code Division Multiple Access) HSPDA:(High-Speed Downlink Packet Access) TD-SCDMA: (Time Division-Synchronous Code Division Multiple Access)</td>
<td>Digital, multimedia, global roaming across a single type of wireless network (for example, cellular), limited IP interoperability, 144Kbps to several Mbps.</td>
</tr>
<tr>
<td>4G</td>
<td>TBD: (To Be Defined)</td>
<td>Global roaming across multiple wireless networks, 10Mbps-100Mbps, IP interoperability for seamless mobile internet.</td>
</tr>
</tbody>
</table>

- Wap: To achieve greater efficiency in data transformation WAP uses a compressed binary format. scalable, extensible protocol stack that help to run the system more efficiently over low bandwidth of HTML (Saha et al., 2001).

---

• i-Mode: i-mode provides continuous internet access to mobile phones. This service based on compact Hyper text Markup Language (cHTML), and provides an alternative to WAP. Keep in mind the limitations of wireless infrastructure, like limited bandwidth, small screen size, display (LCD) and four point command navigation button. A micro-browser application is used for the Netscape (Stuart et al., 2003).

• NFC: This technology is based on Radio Frequency Technology (RFID). RFID system consists of two components: one transponder that contains information like product identification number, price or date and one transceiver that can read or write information. NFC device can read out RFID devices are brought together. NFC offers a sensitive way of sharing data between electronic devices (Falke et al., 2007).

5.3 Research question 3: Success Factors of Mobile advertising

5.3.1 Asian male

• Content (Entertainment, Informativeness, Irritation, Credibility): All of the Asian male respondents were agreed with credibility and irritation of mobile advertising content, important role in mobile advertising. Two respondents were thinking that entertainment should be included does not play any role for him. About the informativeness two respondents said that it is the most important to him.

• Time of transmission: Two respondents said that time of transmission is necessary for them because they don’t like that someone One interviewee said that if advertising company will send him some good offer during his personal possible he would like to buy that product.

• Personalization: All respondents were agreeing at this point that personalization should be based on users attribute. it would highly increase the popularity of mobile advertisement.

• Consumer control, permission and privacy: One interviewee said that consumer control, permission and privacy are same point that is also discussed

• in (pop up) emails matter. M-advertising companies should not use popup messages strategy and people dont like to give permission that kind of messages because it disturbs the privacy of the customers and and one of them was saying
that mobile phone is a very personal device, so in advertising, factors like consumer control, permission and privacy should be take care by the companies.

5.3.2 Asian female

- **Content(Entertainment, Informativeness, Irritation, Credibility)**: All Asian female respondents said that informativeness, avoiding irritation and credibility are very advertising content, whether last one does not think entertainment as important factor in advertising content.

- **Time of transmission**: During the interview all respondents were strongly agree at this point that there should be a specific time for m-advertising. One interviewee said that its schedule should be in the receivers hand, other interviewee said that during her personal activities she doesn’t like to receive phone call; but at specific time she may like to receive advertising.

- **Personalization**: All selected female respondents were also agreeing at this point that personalization is a very important phone companies can gain more attention of customer and can raise the popularity of mobile advertising, because people like customized or personalized service.

- **Consumer control, permission and privacy**: Two of the respondents explain that these three points are the most significant factors that must be mobile advertising can be successful only, if companies take permission before advertisements sending, if the customers have control over it and if companies maintain the privacy about customer data.

5.3.3 European male

- **Content(Entertainment, Informativeness, Irritation, Credibility)**: One of the respondents says, he likes those advertisements that provide some entertainment like cartoons people are very busy, so don’t have much time to spend on such things. They think one advertisement must over it should be easy to understand. But our first respondent was also agreed on the point that credibility and informativeness are also two important factors of an advertisement.

- **Time of transmission**: This is a very important issue to one of the respondents. He thinks the people who works somewhere are always busy, for them the advertisement transmission time is very important some possibilities by which one person can get such advertisement in his or her free time like in weekends. and
when they are out of class they open it. So time factor is not very important issue for them.

- **Personalization**: Three of our respondents give positive response about personalization. They think every people like to provide personalized advertisement it will be better for both the customer and the company.

- **Consumer control, permission and privacy**: All the respondents strongly agreed on this point. They say that, sometimes many companies send there remains no control over these advertisements without deleting those, which make customer irritated. They also added, companies must keep in mind that they are using such a device for sending advertisement which is extremely personal. So they must handle with care.

### 5.3.4 European female

- **Content(Entertainment, Informativeness, Irritation,Credibility)**: Two of the respondents think that the main issue of an advertisement is to provide information to the provided in a clear way, means it should not misguide people. It is also necessary to present the information in attractive manner, thats why credibility is another important factor which they consider. Both of them have neutral feelings about entertainment. But our third respondent thinks entertainment is also necessary with informativeness and credibility.

- **Time of transmission**: All of the respondents say that transmission time is not so important factor for them. students can select time for getting such advertisements when they after classes or any preferred time.

- **Personalization**: Three of the respondents believe that every one like personalized products or services. companies must give their attention on each and every customer desire separately. This application can make the customers happy, which is very important for a company, they say.

- **Consumer control, permission and privacy**: As the all other respondents these three also agreed that customer control, permission and privacy are marketing so, companies must treat every customer according to their desire separately. Before sending some one advertising in their mobile phone a company must ask permission, if a customer permitted then company, and all the customer should have the control on whether they want to get more advertisements phones.
Chapter 6

Data Analysis

The data that we have collected for our research will be analyzed in this chapter. First we will analyze the data of each case against the frame of reference. After that, each case will be compared with the other cases.

6.1 Within-case analysis

In this part we will compare our collected data with the frame of reference that is presented in chapter three. And the data will be analyzed here in order of research questions.

6.1.1 R. Q. 1. Applications of mobile advertising.

6.1.1.1 Asian Male

- **Mobile couponing**: Dickinger *et al.*, (2004) identified that mobile couponing as a useful way of mobile advertising and it is companies should adopt it; even they never received a coupon on their mobile but they have knowledge about manual coupon and on behalf of this they were agreed with Dickinger *et al.*, (2003) theory.

- **Information services**: According to Dickinger *et al.*, (2003, 2004), mobile advertising is also a good source of information services. Here all Asian male think as same as Dickinger (2003) *et al.*, more over they added mobile advertising is fast, attractive and easy in information delivering.

- **Mobile CRM**: Dickinger *et al.*, (2004) also states that m-advertising is very useful for establishing strong customer perfect knowledge about customers needs and
wants are necessary for companies while providing mobile advertisements. But third one was not fully satisfied.

• **Branding** : The theory of Dickinger *et al.*, (2004), Kavassalis and Spyropoulou, (2003) refer that mobile advertising is highly applicable for creating brand awareness and the firms are now using greater degree of m-advertising than other direct marketing channels. All male were satisfied with this theory and explain it that companies can adopt m-advertising for creating brand image.

• **Entertainment** : The all interviewees were agreed that, at present mobile has become a good source of entertainment. theory, that is entertainment services increase customer loyalty and m-advertising are a good source of companies should care about customers choice and should try to know what customers want as entertainment service.

• **Product launch** : According to Dickinger *et al.*, (2004) mobile advertising provides supports to product launch, especially be clear that product launching message reaches at the right destination. Third one said that SMS facility best way is TV, internet.

• **Location based services** : Dickinger *et al.*, (2004), Yonus *et al.*, (2003) say that location based services are highly significant for and said mobile advertising is good because it can provides benefit on time by different ways.

### 6.1.1.2 Asian Female

• **Mobile couponing** : Dickinger *et al.*, (2005) identified mobile couponing as a useful way of mobile advertising and it is gaining couponing. They introduce some points about mobile couponing, such as people receives lots of SMS in their mobile phone, so there remains possibility of miss management, and if bar code doesnt work on time r problem. But at the end of result their overall thoughts were, they can use it if these problems will remove.

• **Information services** : Dickinger *et al.*, (2004, 2005), state that mobile advertising is also a good source of information services. try to prove it that information services through mobile phone are good by proving some examples.

• **Mobile CRM** : One respondent was agreeing with Dickinger *et al.*, (2005) that m-advertising is very useful for establishing One highlighted the shortage of message character. Third interviewee was explaining that bundle So she was not satisfied in this manner.
• **Branding** : Dickinger *et al.*, (2004), explain that mobile advertising is highly applicable for creating brand awareness. All three females pass their comments in a positive manner that was supporting the voice of Dickinger *et al.*, (2004) research.

• **Entertainment** : According to Dickinger *et al.*, (2004), entertainment services increase customer loyalty and m-advertising facility in mobile phone but one interviewee was not fully satisfied.

• **Product launch** : Dickinger *et al.*, (2004) state that mobile advertising provides supports to product launch, especially for advertising of product launch, but other one said that sometimes mobile configuration can be a problem for m-advertising.

• **Location based services** : Dickinger *et al.*, (2004), Yonus *et al.*, (2003) say that location based services are highly significant for in users hands, when they need it they activate otherwise deactivate. Other one said she would like it but ignore such advertisings.

### 6.1.1.3 European Male

• **Mobile couponing** : According to Dickinger *et al.*, (2005), mobile couponing is a very popular application of mobile think it is more convenient than the paper coupons. But our third respondent is not agreeing with the purpose rather than general purpose.

• **Information services** : The theory of Dickinger *et al.*, (2004) says that mobile advertising is a good source of information short volume of information provided via m-advertising can mislead people. And two other respondent are provide the desired information of people. Moreover, one respondent is hopeful about the incoming technologies, he thinks new technologies can make these types of applications more prominent.

• **Mobile CRM** : The first respondent thinks that m-advertising can be helpful in developing customer relationship, when that particular store, if he is getting m-ads about that product always, then he or she may like it. But two other respondents do not see any relation between mobile advertising and CRM, while Dickinger *et al.*, (2005), refers that m-ads is very useful for building strong customer relationship.

• **Branding** : Dickinger *et al.*, (2004), state that firms are now applying m-ads in a high extent than other direct marketing channels, as m-ads are highly applicable for brand awareness creation. Two of the respondents comply with the author but another one is not agree with
this theory. He thinks sending m-ads can sometimes create negative impression about a company.

- **Entertainment**: As refereed by Dickinger et al., (2004), all three respondents say that m-ads those provide downloading new updates can give people a release in their monotonous life.

- **Product launch**: By complying with the author Dickinger et al., (2004), all three respondents say m-ads can provide good support while launching a new product or service.

- **Location based services**: According to Dickinger et al., (2004), Yonus et al., (2003), for providing location based services m-ads are location based m-advertisings should be provided to the users when they need it, not other time. Means if location based information like nearest hotels, restaurants, offers in shopping malls and so on.

### 6.1.1.4 European Female

- **Mobile couponing**: As refereed by Dickinger et al., (2005), mobile couponing as a very useful way of mobile advertising is mobile couponing rather than paper coupons as a person doesn’t need to carry any extra paper with them for or paper.

- **Information services**: According to Dickinger et al., (2004, 2005), m-advertisings can be considered as good source of information. provided by internet. Another respondent thinks that it provides enough information and she is more she prefers other media for advertising rather than mobile phone.

- **Mobile CRM**: Dickinger et al., (2005) states that m-advertising is very useful for establishing strong customer connection. While the other respondent is partially agreed with the theory and she gives one real life example of Lindex, a store that provides m-advertising to her mobile phone.

- **Branding**: As Dickinger et al., (2004) says, for creating brand awareness m-ads are highly applicable at present market only. Otherwise it will not work for any of the respondents.

- **Entertainment**: According to Dickinger et al., (2004), m-advertising is a good source of entertainment, thus companies are m-advertisements that offer music downloading, games, and news. But the other respondent doesn’t want games as entertainment, but prefers music and news provided via m-advertisements.
• **Product launch** : As stated by Dickinger *et al.*, (2004), m-advertising can provide good support to product launch, to get some idea about any new product or service that is going to be launched. People may become interested and go to visit that particular product or service.

• **Location based services** : Dickinger *et al.*, (2004), Yonus *et al.*, (2003) refereed m-advertising is highly applicable in location a planned tour people may not need this type of services. But two other respondents comply with the theory and say this type of services can be useful for people when they go in a new place.

### 6.1.2 Research question 3: Success Factors of Mobile advertising.

#### 6.1.2.1 Asian male

• **Content(Entertainment, Informativeness, Irritation, Credibility)** : According to Dickinger *et al.*, (2004), Yonos *et al.*, (2003) and Ducoffe (1996), Varsheney and Vetter (2003), credibility, avoiding irritation are important factors those must be considered by a company while sending advertising content play important role, so companies should take care of these factors.

• **Time of transmission** : Dickinger *et al.*, (2004) said that, while delivering m-advertising, transmission time is very important to avoid customer annoyance. After collecting the answers from three male respondents it was found that the importance of message with right time transmission that customer want.

• **Personalization** : According to Dickinger *et al.*, (2004), and Barwise *et al.*, (2002), mobile phone is a very personal device, respondents were agreeing that personalization is a need of mobile users and m-advertising should be according to their choice.

• **Consumer control, permission and privacy** : Barwise *et al.*, (2002) and Petty (2000) and Haghirian *et al.*, (2004) state that customer control, and the company can be benefited by these factors. One respondent said that consumer control, permission mobile world and other two interviewees were agreed with him.

#### 6.1.2.2 Asian female

• **Content(Entertainment, Informativeness, Irritation, Credibility)** : Dickinger *et al.*, (2004), Yonos *et al.*, (2003) and Ducoffe (1996), Varsheney and Vetter (2003) and Pavlou credibility, avoiding irritation are important factors and those factors must be considered by a company content are really necessary. But two respondents
were supporting much the factor informativeness of m-advertising and one was showing interest in entertainment.

- **Time of transmission**: Dickinger et al., (2004), while delivering m-advertising, transmission time is very important to avoid control, then people can receive mobile advertisings in desired time.

- **Personalization**: Dickinger et al., (2004), and Barwise et al., (2002), state that, mobile phone is a very personal device, female respondents were agreed at this point and said that people always prefer to receive things according to their interest. Thus personalization can increase the success of mobile advertising.

- **Consumer control, permission and privacy**: As stated by Barwise et al., (2002) and Petty (2000) and Dickinger et al., (2004) customer control, and the company can be benefited by these factors. All three respondents said that these three points are the basic need of mobile users for the success of mobile advertising.

### 6.1.2.3 European male

- **Content(Entertainment, Informativeness, Irritation, Credibility)**: As stated in the frame of reference that there are some important factors that can affect the content (1996), informativeness (Varsheney et al., 2003, and Pavlou and Stwart (2002), irritation and Credibility important than entertainment, but it is also important to consider whether the advertisement is irritating or not. While one of our respondent is considering entertainment as important as credibility and informativeness.

- **Time of transmission**: According to Dickinger et al., (2004), while delivering m-advertising, transmission time is very important dont agree. But all of them suggest that there should be a way of selecting preferable time of receiving such advertisements via mobile phone.

- **Personalization**: Dickinger et al., (2004), and Barwise et al., (2002), state as mobile phone is a very personal device, Three of the respondents greatly appreciate this matter, they thinks this type of personalized m-ads will come up with good result for both the customer and the company.

- **Consumer control, permission and privacy**: As stated by Barwise et al., (2002) and Petty (2000) and Dickinger et al., (2004) customer control, and the company can be benefited by these factors. All respondents are strongly agreed on this theory. before sending m-advertisement, otherwise that can have a negative output.
6.1.2.4 European female

- **Content(Entertainment, Informativeness, Irritation, Credibility)**: According to Dickinger et al., (2004), Yonus et al., (2003) and Ducoffe (1996), Varsheney and Vetter (2003), and Pavlou and Stewart (2002), Stewart and Pavlou et al., (2002), in a content of mobile advertising entertainment, informativeness, credibility, avoiding irritation are important consider informativeness is the most important factor here, but the information should be provided avoiding irritation. But they are partially agreed with entertainment. While the other respondent think entertainment is also necessary with the other factors.

- **Time of transmission**: As referred by Dickinger et al., (2004, 2005) m-advertising transmission time is also included in success as author. But they also prefer the option of selecting the desired time of receiving advertisements.

- **Personalization**: Barwise et al., (2002) and Dickinger et al., (2004), consider personalization as a crucial factor for mobile mobile advertising a company can make its customer happy which is highly important for business.

- **Consumer control, permission and privacy**: According to Barwise et al., (2002) and Petty (2000), both the customer and the company can be benefited stopping of more advertisement receiving is another important factor for m-advertising. All three mobile advertisement may not succeed as mobile phone is very personal device.

6.2 Cross-case analysis

In this part we will compare data of each case against other. At first we will present our research question one then present research question three. After comparison between two cases we will draw a summary of comparison of each research question.

6.2.1 Cross case analysis of Research question 1.

R.Q.1. Applications of mobile advertising.

Key:

- “+” Shows that the respondent is agreed about the variable with the theory that is presented in frame of reference. This is a situation of full agreement.
Table 6.1: Cross case analysis of Research question 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>case one</th>
<th></th>
<th>case two</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1. Mobile couponing</td>
<td>R1</td>
<td>R2</td>
<td>R3</td>
<td>R4 R5 R6</td>
</tr>
<tr>
<td></td>
<td>+</td>
<td>+</td>
<td>+/-</td>
<td>+/- +/-</td>
</tr>
<tr>
<td>2. Information services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>R7 R8 R9</td>
<td>R10 R11 R12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>+/-</td>
<td>+/-</td>
<td>+/- +/-</td>
</tr>
<tr>
<td>3. Mobile CRM</td>
<td>R7</td>
<td>R8</td>
<td>R9</td>
<td>R10 R11 R12</td>
</tr>
<tr>
<td></td>
<td>+</td>
<td>+/-</td>
<td>-</td>
<td>+/- +/-</td>
</tr>
<tr>
<td>4. Branding</td>
<td>R1 R2 R3</td>
<td>R4 R5 R6</td>
<td>R7 R8 R9</td>
<td>R10</td>
</tr>
<tr>
<td></td>
<td>+</td>
<td>+</td>
<td>+/-</td>
<td>+/-</td>
</tr>
<tr>
<td>5. Entertainment</td>
<td>R7</td>
<td>R8</td>
<td>R9</td>
<td>R10 R11 R12</td>
</tr>
<tr>
<td></td>
<td>+</td>
<td>+/-</td>
<td>-</td>
<td>+/- +/-</td>
</tr>
<tr>
<td>6. Product launch</td>
<td>R7</td>
<td>R8</td>
<td>R9</td>
<td>R10 R11 R12</td>
</tr>
<tr>
<td></td>
<td>+</td>
<td>+/-</td>
<td>-</td>
<td>+/- +/-</td>
</tr>
<tr>
<td>7. Location based services</td>
<td>R7</td>
<td>R8</td>
<td>R9</td>
<td>R10 R11 R12</td>
</tr>
<tr>
<td></td>
<td>+</td>
<td>+/-</td>
<td>-</td>
<td>+/- +/-</td>
</tr>
</tbody>
</table>

- “-” Shows that the respondent is not agreed about the variable with the theory that is presented in frame of reference. This is a situation of full disagreement.
- “+/-” Shows that the respondent is supporting the theory to some extent but not fully. This is a situation of partial agreement.
- Case one presents responses of Asian interviewee.
- Case two presents responses of European interviewee.

6.2.1.1 Cross case analysis of male and female respondents within case one

The above table of cross case analysis presents significant differences as well as similarities among the male and female respondents of case one. This table shows that all three male respondents are highly agreed on the applications of mobile couponing, information services, branding, entertainment, product launch and location based services. But all female respondents are strongly agreed only on application of branding. Three female respondents are partially supporting mobile couponing and information services. Application of entertainment and product launch are strongly supported by two female respondents, and one female is partially agreed on these two applications. Location based services are partially supported by two female respondents and another female is supported this application strongly. Two male respondents are strongly agreed about mobile CRM and one male is disagreed on this application. But among the female respondents, one is strongly agreed, one is disagreed and one is partially supporting this application.
6.2.1.2 Cross case analysis of male and female respondents within case two

Analysis of case two also presents some similarities and differences among the male and female respondents. All the male as well as all female respondents are strongly agreed on the application of entertainment and product launch. Application of mobile couponing is supported highly by two male and two female respondents, but one male is opposing this application and one female is partially supporting the same application. Application of information services is opposed by one male and one female respondent, while two male are supporting this application strongly and two female are supporting the same application partially. Two male as well as two female respondents couldn't find any relation between mobile CRM and mobile advertising, but one female is supporting the application strongly and another male respondent is partially agreed on this application. Three female respondents are partially agreed on the application of branding, whereas one male is strongly supporting, one is partially supporting and another male is opposing this application. Location based services are strongly supported by two female respondents and one is opposing this application, but all three male respondents are supporting this application partially.

6.2.1.3 Cross case analysis of case one and case two

While doing the cross case analysis of research question one we find so many differences as well as similarities also. From the table above we see, the respondents of case one most prefer the application of m-advertising for branding, while only one respondent of case two is agreeing on this point, four of them are partially agreeing and one is denying this application. The respondents of case two prefer most the application of entertainment and product launch, and the most respondents of case one is also agreeing on entertainment, only one respondent is partially agree on this application. All the respondents of case one and two like the music downloading among all entertainment services. While talking about product launch, three respondents are agreeing, two are agreeing partially and one has negative response from case one. Mobile couponing gets more preference among the respondents of case two than case one. But in case two we also get one negative comment on mobile couponing, while in case one, we get three positive response and three neutral responses. In case of informativeness we get two negative comment from case two, those respondents think advertising via internet and other media is more informative than mobile advertising. From case one we get three positive and three partially agreeing comments. We also get two positive and two neutral comments from case two on this application. Most respondents of case two show negative response about mobile CRM, while in case one three responses are positive, two are negative and two are agreeing partially. About location based services four
respondents of case one think it will be a good application and two of them have neutral response. In case two three respondents think this application may work, while two are saying it will work and last respondent is not interested about this application.

### 6.2.2 Cross case analysis of Research question 3.

R.Q.3. Success factors of m- advertising.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Case one</th>
<th>Case two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1. Content:</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Entertainment</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Informativeness</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Irritation</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Credibility</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2. Time of transmission</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Personalization</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4. Consumer control, permission and privacy:</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Key:

- “+” Shows that the respondent is agreed about the variable with the theory that is presented in frame of reference. This is a situation of full agreement.

- “-” Shows that the respondent is not agreed about the variable with the theory that is presented in frame of reference. This is a situation of full disagreement.

- “+/−” Shows that the respondent is supporting the theory to some extent but not fully. This is a situation of partial agreement.

- Case one presents responses of Asian interviewee.

- Case two presents responses of European interviewee.
6.2.2.1 Cross case analysis of male and female respondents within case one

The above table shows that irritation and credibility of a mobile advertising content are considered as highly important to the all male and female respondents. Informativeness of content is strongly supported by three female respondents, whereas two male respondents are supporting this variable strongly and one male is opposing this variable. Three female respondents regarded the variable time of transmission as important, but two male respondents believe this application is essential and one male is partially supporting this variable. All the respondents of case one, male as well as female, believe personalization and consumer control, permission and privacy are extremely significant for mobile advertising.

6.2.2.2 Cross case analysis of male and female respondents within case two

Credibility and informativeness of a mobile advertising content are vastly significant for all respondents of case two. The entertainment of content is supported strongly by only one male respondent, other two male are opposing this variable, but three female respondents are supporting this variable partially. Two male as well as two female respondents consider irritation of content is important, whereas one male and one female is partially supporting the importance of this variable. About the time of transmission, three female respondents are partially agreed, but two male are opposing the importance of this variable and another male is supporting this variable partially. Personalization and consumer permission, control and privacy are extremely important to all respondents of case two. More over all the respondents believe without these last two variables mobile advertising can never be successful.

6.2.2.3 Cross case analysis of case one and case two

From the table above we can see there are some differences between case one and case two. Case one is showing more positive attitude than case two. For example while talking about content of m-advertising most of all respondent are considering entertainment, informativeness, irritation and credibility are important factors. Only two of the respondents have partial agreement about entertainment and one ha is partial about the point irritation. More over only one respondent is saying that internet is better than mobile advertising, while considering informativeness. But in our second case we find, informativeness and credibility are the most important factor in m-advertising content. And the second important thing is irritation and some are negative, some are neutral and one positive response about we get about entertainment. In the point transmission
time five people are considering it as important and another one is thinking it partially important in case one. But in case two we find three people partially agree, two is disagreeing totally and only one is giving positive response on this point. While considering our last two points personalization and consumer control, permission and privacy, all the respondents of both cases consider these points highly important.
Chapter 7

Conclusion and Implications

In this chapter we will present the answer of our research questions. Then we will provide conclusions based on the previous theory and our analyzed data. And we will also include implications for companies, for theory and for future research.

7.1 Conclusion

In this part of the study we will draw conclusion of our research questions on the basis of our various findings during data analysis. We will try to find the reasons among the similarities and differences between our two cases.

7.1.1 How can applications of mobile advertising be described?

The use of mobile advertising application is not very much common in present period but we can see in cross case analysis, the level of respondents interest. By selecting the most applicable theories as our frame of reference and by analyzing empirical data we find out that some applications are highly preferable and some are relatively less preferable to customer, we also get some suggestions provided by our respondents. Those are:

- By analyzing our empirical data of mobile couponing we find that most of the respondents prefer negative response. So, mobile couponing can be a useful application of mobile advertising.

- About application of mobile advertising as information service our respondents say that due to the less bandwidth five respondents are partially agree on this application. They think due to these king the application is good enough and
two more is disagreeing on this application. So, companies should and the new technologies can help in solving the existing problems.

- Most of the respondent could not find the connection between mobile advertisement and customer relationship. But if any customer gives permission or the m-advertising support any customer interest, then a company can send m advertisements to those customers.

- While looking at case one all the respondents like mobile advertising for creating brand awareness. So, m-advertising can be used for creating brand awareness.

- Well almost every person like mobile entertainment for example: they like to use this device as a m-advertising application for advertising companies and after this application they can get very good result.

- Here is better result in product launch advertisement through mobile phone. Mostly respondent and according to respondent result we can easily understand that this application is applicable with plus result.

- In location based service, most of the respondents have positive answer, while only a few have neutral response. So, we can say this will a good application of mobile advertising. can make someone disturb some time. Rather there should be one particular calling number, by using which shopping mall, or information about nearest hotel or restaurant and so on.

![Overview of mobile advertising applications.](image)

**Figure 7.1:** Overview of mobile advertising applications.

Form the above diagram of mobile advertising application we get the view that about 60% of the respondents are appreciating mobile advertising application, while about 27% is partially agree about these applications and only about 13% is disagree with these applications. So, we can conclude that the popularity of mobile advertising applications
is increasing day by day. And hopefully the technological innovation will increase the popularity of mobile advertising.

7.1.2 How can the available technologies used in mobile devices be described?

In our study we have used documentation for this research question which is presented in our literature review chapter and we also include technological review for this research question. As we mentioned in our frame of reference that we have selected some technologies those enable mobile advertising. Among those SMS, MMS and Bluetooth are most common technologies present in market. Here we will talk about those technologies which can make mobile advertising more efficient. Those are:

- **WAP**: This technology enables wireless users to use internet content and information system via infotainment as news, location based service, weather forecasts and so on.

- **i-Mode**: This technology enables the users to send email or message that contain up to 500 characters. This service includes email, downloading ring tones, games, news updates and so on.

- **3G**: This technology is called digital super highway which means a common digital foundation that supports 5000 characters for email or messages and this offers bit rates of 144Kbps to several Mbps. 3G downloads from their handsets, capable of special ring tones, games, music, TV, cameras and also voice access and send files, receive and send emails up to 5000 characteristics.

- **4G**: This is the next generation technology of 3G network. This will allow higher bit rate than entertainment services, mobile financial applications, proactive service management and mobile auctions introduce digital multimedia broadcasting, multi cast process that means audio video services in motion in more user centric and highly personalized manner.

- **NFC**: This stands for Near Field Communication. This technology will support various applications as mobile payment, mobile advertising, and ticketing, peer to peer data exchange and so on.

As we find from our first research question that customers have problem with the slow internet connection via mobile phone, problems with higher bandwidth connection, higher bit rate in data transfer, enabling it takes time to download files, pictures, they also
have limited characteristics problems. So, these technologies can solve all their more characterized data transfer and so on.

### 7.1.3 How can the success factors of m-advertising be described?

After analyzing our empirical data we have found some differences with the theory and also some suggestion from the respondents. From our analyzed data we find:

- Customers consider two factors as most important among all the factors provided by theory. Those are: personalization and customer control, permission and privacy. The entire respondents were strongly agreeing on these two factors. They say all people like personalized product as this type of products support present. So, people will prefer those services or products that support their interest, on which people will have control over, which respect customer opinion.

- While talking about content of mobile advertising, most respondents consider informativeness, respondents a mobile advertising content must be precise, short, concentrated on their focus, easy to understand and attractive also.

- Most of the respondents of case one are considering this factor as important while only one person in case that there should be some option by which people can select their preferable time of getting such advertisement. They think this system can increase the popularity of mobile advertising.

### 7.1.4 Overall conclusion of research purpose

This study finds a modified picture of frame of reference (Figure: 7.2). This modified figure of mobile advertising is presented bellow:

This study finds following changes those can be made to the frame of reference:

- Interconnection among the three components of mobile advertising.

- Enabling technologies are the main facilitator of mobile advertising, thus it has the biggest circle than other two components.

- The enabling technologies are influencing both the m-ad applications and m-ad success factors, and for this the circles of m-ad applications and m-ad success factors are presented within the circle of enabling technologies.

- m-ad applications and m-ad success factors are equally important in mobile advertising, thus both of the components have equivalent circle.
Interconnection among the three components of mobile advertising: m-ad application, m-advertising success factors and m-advertising enabling technology has been found by this study. Among these three components enabling technologies are the most important and work as main facilitator of mobile advertising. And without technology mobile advertising is not possible, thus it is influencing the two other components m-ad applications and m-ad success factors. Moreover, the more the technologies will become stronger or capable, it will provide more support to m-ad applications and m-ad success factors; and by this mobile advertising can be presented more efficiently to customers. This study also finds that m-ad applications and m-ad success factors are equally important in mobile advertising. Without m-ad success factors (especially personalization, customer permission, control and privacy) mobile advertising applications cannot be successful. So, for the better utilization of mobile advertising in B2C marketing companies must consider m-ad success factors with high magnitude for the success of m-ad applications; and it should be remembered that the whole process of m-advertising is completely dependent on enabling technologies.

### 7.2 Implication

Here is implication for the various fields where this study can be applicable. These are implications for companies, theory and future research.
7.2.1 Implications for companies

While conducting this research we come to know about the likings and disliking of customer, we also come to know which factors are more demanding to people for making mobile advertising successful. We think if the companies concentrate on these factors they can have a good result. Those factors are:

- Companies must be concern about customer data; they should protect privacy of customer.
- Customers should have control over receiving or stop receiving mobile advertisements.
- Before sending any advertising companies should confirm whether the advertising support his or her interest, more over companies should try to provide personalized advertisings.
- Advertising content must be short, precise, concentrated, focused and easy to understand.
- According to our study, mobile advertising can be applied for couponing, for creating brand awareness, as entertainment provider, in location based services, while launching new product or service and also for building customer relationship.
- As customer suggested there should be some way of selecting preferable time of receiving mobile advertising.
- There should be some way of getting location based mobile advertising who need that service not to provide all the people.

7.2.2 Implications for theory

We have selected some theories that suits best for our research from the literature review chapter. These selected theories we present in our frame of reference. But after collecting and analyzing our empirical data we find on some points customers are not agreeing with the theory. Those points are listed below:

- While talking about the different applications of mobile advertising our respondents were not fully agreed interrelated, so we find a way of making customer relationship via mobile advertising while answering our possible to deliver personalized advertisement via mobile phone, then CRM can be build.
• As contradicting the theory of research question three, respondents are saying entertainment within the content of a mobile advertising and transmission time of advertising is not as important to them as the author is saying.

7.2.3 Implications for future research

Due to the short period of time this study has selected a short sample size. But while doing this research various interesting points have been found which can be considered for future research. Those points are:

• A research can be done with the same topic but considering a large number of data and with more time involved in it.

• More variation in data can also be included in future research like: age, gender.

• As the technology is changing day by day and the customer demand is changing also. So, what the customer wants with the change in new technology is there any barriers in adopting new technologies like: social barrier, cultural barrier and so on, these can be investigated in future research.

• Customers also have some problem with the screen size of mobile phone, as it is small. So, how this problem can be minimized or eliminated can be another topic of future work.

Another point that is found by this study is, all people are not using same mobile phone set and all mobile sets dont support same feature. So, in future is it possible to provide same service in all types of mobile phone sets; it can be a very interesting topic for future research.
Appendix A

Interview Guide

Name:
Age:
Nationality:
e-mail address:

R.Q.1 *How can applications of mobile advertising be described?*

1. What do you think about mobile couponing sending by different companies? Why do you think so?

2. How much you consider mobile advertising as information service?

3. Do you think that by providing m-advertisement any company can establish a strong relationship with the customer? Why?

4. Do you think that by sending m-advertisement any brand or company can gain customer attention? Why?

5. Can the entertainment services provided via mobile phones (like: games, horoscope, music, etc) increase customer loyalty? How?

6. While launching a new product or service in market if a company sends m-advertising to customers about that particular product or service, then what type of feedback the company will get? Why do you think so?

7. Many companies are now providing various location based services via mobile phones, till example: information about the nearest hotels or restaurant, sometimes information even about all the special offers in a particular shopping mall or store, while you are
walking in front of that store or shopping mall. As a customer what is your opinion about these types of services?

RQ 3: *How can the success factors of m-advertising be described?*

1. What do you think about the content of m-advertising? Which factors you think important in content of advertising, for example:

   - Entertainment
   - Information
   - Credibility
   - Irritation

   Why you think so?

2. Do you think message transmission time is an important factor? Why do you think so?

3. What is your opinion about personalized advertising?

4. Do you think customer permission, privacy is important in m-advertising? Why?
Appendix B

List of Respondents

Asian Male:

- Naveen Kumar, navran-7@student.ltu.se
- M.Azam Khan, muhkah-6@student.ltu.se
- Moola Santosh Narshina Parthab, prathap.moola@gmail.com

Asian Female:

- Wei Guan, guanwei1119@gmail.com
- Nowshir Fatima, sharnaaziz@gmail.com
- Shilpa Agarwal, shilpa.agarwalicb@gmail.com

European Male:

- Lundqvist Anders, nadlun-4@student.ltu.se
- Nevosad Lukas, luknev-6@student.ltu.se
- Ali Nawaz, alinawaz86s@yahoo.com

European Female:

- Elin Chrunak, eliblo-5@student.ltu.se
- Maria, amause-7@student.ltu.se
- Anna Carin, perana-6@student.ltu.se
Bibliography


[38] http://en.wikipedia.org/wiki/Online_advertising, 22-08-07


[86] Saha S., M. Jantgaard, J. Villasenor, Bringing the Wireless Internet to Mobile Devices, Published in Computer magazine, Published by IEEE, Vol. 34, pp. 54-58, 2001.


[95] TTI, Mobile Commerce Has Taken Off, Says Telecom Trends International, 2004. Available at: [http://www.telecomtrends.net/pr_MIIS-1.htm](http://www.telecomtrends.net/pr_MIIS-1.htm)


