THE EFFECTIVENESS OF USING E-MARKETING TO PROMOTE PRODUCT ON SALE FOR SUPERMARKET

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THE EFFECTIVENESS OF USING E-MARKETING TO PROMOTE PRODUCT ON SALE FOR SUPERMARKET

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Abstract

In these days most supermarkets acknowledge the importance of SMS marketing and web in reaching and interacting with their customers. However, there is much discussion regarding the effectiveness when it comes to SMS marketing. this study helped the customers and sellers and willing to accept, reading and using SMS messages: effective is SMS marketing compared to traditional marketing communications. The goal of this study is to investigate the effectiveness of SMS promotion compared to traditional ways in marketing for different aspects and on the other hand, to develop prototype by using web and SMS technology to apply this system and extent consumers are willing to accept commercial messages on their mobile phone, since the effectiveness of SMS marketing highly depends on this willing. The results of this research indicate that the use of the web and SMS for the benefit of the seller and the buyer in all aspects instead using traditional ways in promotion.

By the Name of Allah, the Most Gracious and the Most Merciful

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CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

Marketing is set of institutions and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large (Lib, 2007). The term developed from the original meaning which referred literally to going to market, as in shopping, or going to a market to sell goods or services. Marketing as satisfying needs and wants through an exchange process (Kotler, 2000).

E-marketing, has become a far more powerful means of marketing in the world, there is also the cheapest of all solutions to the marketing of electronic and affordable now, we can double our sales and competition from the largest companies in our low costs (Burns & Bush, 2000). Target segment, which the public is willing and able to deliver advertising messages to target the customer's home, sitting in his home by his cell phone using SMS messages can also be an announcement of the product on sales or prices of new messages.

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Internet marketing, also referred to as web marketing, online marketing, is the marketing of products or services over the Internet. The Internet has brought many unique benefits to marketing, one of which being lower costs for the distribution of information and media to a global audience, The interactive nature of Internet marketing, both in terms of providing instant response and eliciting responses, is a unique quality of the medium (Ducaffe & Robert, 1996). Internet marketing is sometimes considered to have a broader scope because it refers to digital media such as the Internet, e-mail, and wireless media (Hanson, 1999).

In any business entity based on the demand and supply, effective marketing skills is the key to success. And marketing based on the message, and that can be provided in a myriad of ways. Marketing through text messages are more and more popular among business entities, in our day. Therefore, it can be said that the SMS marketing has become a strong relationship between the uses of technology in marketing (Wang & Wang, 2005). This method of marketing is more important than others because of the use of mobile phones has become widespread not widespread among the people (Kirsten, 2009).

With the growing popularity of mobile phones, increasing the intensity of competition between business entities. Mobile marketing and technology gave us tremendous opportunities and how the mobility changed traditional business models . As a matter of fact, the provision of SMS services for marketing, it gives a direct contact with people

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easily and the cost of the target is simple (Michael & Salter, 2006). Now it is important to any business entity for this idea and use of the transmission and reception, when our use of Web services, transmission and reception services, WAP and mobile phones in a way quick and short. Therefore, it can be said that SMS marketing is a particular message transmitted from the targeted group of customers to promote the good news or new offers. There are effective steps for the process of marketing planning and implementation of the concept, pricing, promotion and distribution of goods, services and ideas to meet the individual and organizational goals. Solutions with SMS marketing, and business entities tend to develop long-term relationships with the target group of people (Kirsten, 2009).

Interactive content of these messages and promotional in nature. This solution goes a long way in building confidence between the trader and the buyer, and send text messages are only part of the system and can use other options may be of some commercial entities to use MMS services, and infra-red and Bluetooth, and others, because they create a greater impact on users (Durie, 2005). Compared with other means of marketing and advertising, SMS to provide immediate solutions at hand. In this process can also use SMS as a means to generate the maximum amount of promotion with the lowest possible cost. Therefore, this method proved the best bet for many of the large states and other large enterprises, corporations and homes that want to reach users of its products and services. The SMS marketing is one of the ways of others charged in the matter of promotion of goods and services across a wide range of customer base

(Haig, 2002). "There are now over 2.6 billion mobile users in the world. The adoption of mobile telecommunications worldwide continues to show an upward trend, the forecasts for the remainder of this year indicate that this growth will have accelerated in the final quarter of 2006 resulting in record additions, taking the total number of mobile users globally to 2.7 billion, equivalent to 39% of global population" (Cellular, 2006) (Esato, 2006).

Mobile phones are a usable solution in the community because the majority of them use this device; the computers and Internet are not available for all people. The new integration for the mobile application makes it easier for the people. For example many people in Malaysia have the mobile phone; in fact 93.7% of Malaysian people have mobile phone, because of the cheap price, the small size, and the most important that the users can access and browse the Internet anytime and anywhere (Mcmc.gov, 2007).

1.1.1 PROBLEM STATEMENT

It is difficult to provide computers to all people, and there are many of the problems of access to Internet services for peoples, because of the availability of coverage for mobile devices in any place, it is possible to use Web applications and SMS technology instead of some traditional methods of the promotion, TV promotion through the use of cable and satellite, this way is very expensive. Sometimes the seller uses Magazine promotion, in this way the promotion is also an opportunity to boost sales or through a special print coupons or information on the number or the call to go to the site for more information. Requires the design of the promotion will be weeks or months in advance and can use Newspapers advertise, advertising in the paper, flexible, and easier to adapt at any moment, notice if the need arises color costly. Newspapers short shelf-life. And many traditional ways promotion such as use cars, Distributed paper and sheet in street.

However, some communities may include people who do not know the local language of this community. Therefore, this study is supported options such as language Malay and English language.

The Internet has decreased the overall effectiveness of each of these options over the years, there are still segments of the people are not objective and don't have an understanding of technology. In other words people do not use the Internet at all for one reason or another. There are many methods promotion by using short message service through mobile devices.

1.1.2 RESEARCH QUESTION

1) What are the requirements for E-marketing by WAP/WEB and SMS application?

2) What is the appropriate method to distribute and to manage E-marketing for promoting product on sale by SMS?

3) How to evaluate the proposed application?

1.1.3 OBJECTIVES

This project is aimed to propose a WAP/WEB and SMS Promotion system for the sellers and buyers. The prototype will be designed to help the sellers for promotions products on sale and also helps the buyers. The main objectives of this study are:

1) To design a requirement model for effectiveness promotion by using SMS Messages.

2) To develop the prototype.

3) To test the prototype and its usability

1.1.4 SCOPE OF THE RESEARCH

This study focuses on the designing of the SMS WAP/web and use it in promotes on sales communities, so this research proposes mobile technology in the marketing and promotion, instead distributed papers on doors and streets. All the mobile service providers will be covered in the products, so the people can use the mobile devices to see all information about these products (e.g. price, order service and type) through mobile phone by using SMS technology.

1.2 SIGNIFICANCE OF THE STUDY

The study is appropriate for implementation in all regions in any country, which could open the way for traders to use these services at any time and any place. Specifically, the user downloads to be announced on a daily basis without the trouble or cost money.

This research has a lot of benefits in society and to the traders, so this study is to help citizens access to information through the use of mobile devices. This study, as it is important for all communities, providing them with opportunities for their products from the announcement of the mobile device at anytime, anywhere, quickly and easily. The WEP and SMS users can access to dynamic content such as: product type, prices, discount rate, start and end of promotion.

1.3 CONCLUSION

This chapter introduced the background about the marketing in general and e-marketing and the development in the mobile techniques and benefits of using mobile in promote product on sale.

The WAP/WEB and SMS applications for Marketing and promotion will develop in order to enhance the services performance and increase its customers' satisfaction. In addition this WAP application can promote the customers convenience by offering a mobile services for peoples to see the important things in this supermarkets and what you need. Implementing this prototype will return in many benefits for both traders and the mobile users at the same time. Through this prototype the users save time and effort.

Introduced the background about the Wireless communication and the development in the mobile techniques, also described the problems of this study and the solution for these problems "objectives". The objective of this study is to develop a prototype for marketing and promotion product sale by using SMS and WEP/WEB application.

1.4 THESIS OUTLINE

In this research we can classify our task to five chapters which begin with the introduction section as the first chapter. An overview of the content of the following chapters is as follows:

Chapter 1- (Introduction): This chapter discusses about literature reviews, previous related work and challenges, and more information to understanding the research.

Chapter 2- (literature Review): This chapter discusses about literature reviews, previous related work and challenges, and more information to understanding the research.

Chapter 3- (Research Methodology): This chapter discusses the methodology that has been used in this project, this methodology will contain the major steps Awareness the Problem, Suggestion, Development, Evaluation and conclusion.

Chapter 4- (System Analysis and Design): This chapter discusses analysis design and develop prototype, otherwise this chapter will provide the algorithms; and techniques suggested for this study.

Chapter 5- (discussion and Evaluation): this chapter discusses the design of the questionnaire and the analysis methods that used to involve the usability of the study.

Chapter 6- (Conclusion): this chapter discusses conclusion of the study, study contribution, problems and limitations, and future works.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The large and the huge use of the Web Application handphone technology in business, which can deal with the most facilities (e.g. television, satellite, desktop, laptop, and Internet) the computers. The mobile device in many towns and places contributes to enhanced and develop the business transaction. The mobile phone Become the most important tools that used in which place in the world, the mobile can present some facilities to use just to exchange of pleasantries by the messages (Kolter, 2000). Otherwise the traders can use this device for many applications (e.g. promotions, advertise and many application).

When the traders use web and SMS applications provide a successful and effective vehicle for the big companies and supermarkets in increase sales, the Internet accessing can help to improve the market economy and the country's progress with the Internet technology. The traders skilled when the using of mobile computing to enhance trading and increase sales, most of these technologies can be hard to implement in most of nations, for that the need for the mobile phone become more popular to use by the all peoples because of the rapid growth in the mobile technology and provides the nations

area with the easy accessing to the Internet technology anytime, same the progress countries. The traders and sellers need to know the advantage of the Internet accessing, they do not have the ability to imagine the benefits of the use same this technology to increase sales and improve the market economy, and help the buyers.

2.2 WEB AND WAP DEFINITION

The mean of the WEB application is a computer programming system created by Donald Knuth as the first implementation of what he called (literate programming), the idea that one could create software as works of literature, by embedding source code inside descriptive text, rather than the reverse.

Wireless Application Protocol (WAP) is defined by International Engineering Consortium as an application environment and set of communication protocols for wireless devices to communicate with each other and with any external application. In another words the WAP technology can define as an open international standard for application layer network communications for different communication fields, which its aim to provide and support the users with the Internet accessing from a mobile phone or PDAs (WAP, 2008).

2.3 THE WAP PROTOCOL STACK

The Mobile devices contain the tiny mobile devices such as mobile phone, and devices which need special operating systems such as the pocket PC, which can be able to provide many applications. In another hand mobile devices include the most competitive technology such as the Personal Digital Assistants (PDAs) with or without networking capabilities and mobile phones that may or may not be able to access the WEB (Naismith et al, 2004). The WAP application can be used to reduce the processing operation on the client side effect, which embraces the client and server approach in order, where a mobile phone equipped with other communications technologies such as a micro browser communicate with a WAP Gateway reside on a server, therefore only a simple browser that capable of displaying contents were placed in the phone while all the intelligent and processing done by the server (Singelee & Preneel, 2005) (WAP Forum, 2001).
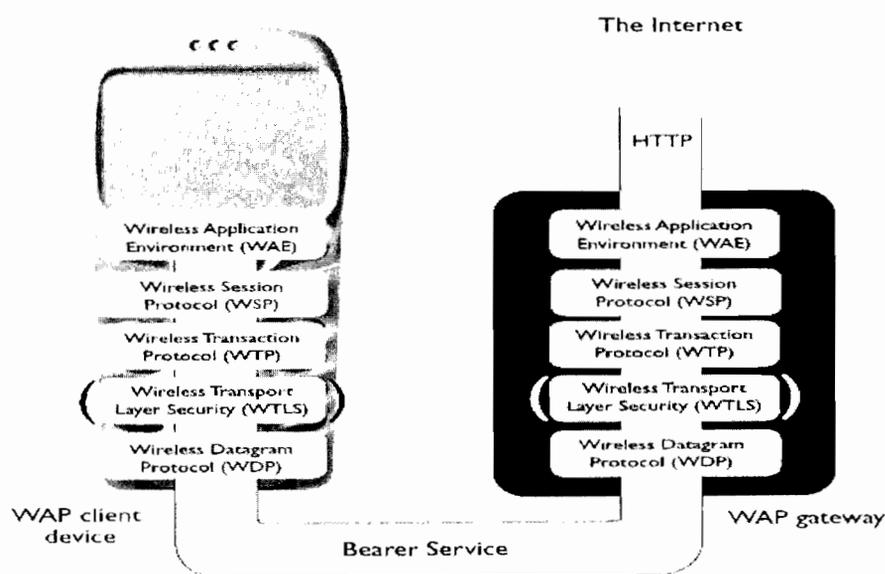
Figure 2.1: WAP Protocol Stack (WAP Forum, 2000).

According to figure 2.1, the WAP layer stack contains the following:

- **Wireless Application Environment (WAE):** This protocol embraces the tools that the wireless Internet content developers utilize. These tools include WML and WML Script, which is a scripting language used in combination with WML.

- **Wireless Session Protocol (WSP):** This protocol provides two types by work with WTP to provide connection oriented service and connectionless service that provides above WDP.

- **Wireless Transaction Protocol (WTP):** This protocol organizes the traffic. It also classifies the request of the transaction into three classes, the reliable two-way, reliable one-way, and unreliable one-way.

- **Wireless Transport Layer Security (WTLS):** This protocol provides an optional layer. It related to the security, data integrity and the user authentication, and this will be important for some applications like WAP-banking.

- **Wireless Datagram Protocol (WDP):** This protocol manages the transmission and makes it easy to adapt WAP to a diversity of bearers (network carriers) from the network layer.

2.4 MOBILE PHONE IN COMMUNITIES

The large used of mobile devices and its application increase day after day. However, mobile device provide and support the multi users to access different services at the same time. Furthermore, mobile devices opportunities for developing and enhances the economies and the information society in the communities and other areas. the using of the WAP technology to achieve the flexible communicates between the people in different areas (Ashok, 2008).

2.5 MOBILE PHONE IN MALAYSIA

Table 2.1: hand phone users by nationality in Malaysia (MCMC, 2007).

Nationality	2005	2006	2007
Malaysian	92.5	90.3	93.7
Non-Malaysian	6.3	7.5	9.7

According to the table above, around 93.7% from Malaysian people use the mobile device, and around 9.7% users from not from Malaysia use the mobile device. This classified to two parts, around 58.4% from the male use the mobile device and around 43.6% from the females (MCMC, 2007).

2.6 THE RAPID GROWTH OF THE MOBILE PHONE

Mobile applications increasingly affect business activity and information distribution. They are gaining wide acceptance due to the increased the customers by using this phone applications the mobile workforce and rapid enhancement in wireless communication devices and technologies. Many applications allow sending and viewing email, browsing the Internet, viewing traffic and weather reports, watching movies, and accessing back-end database systems (Elalfy, 2005)

The large progresses of affordability and the accessing of the mobile phones in all worlds became more familiar to use in the nations. There are facts that need to determine during the increasing of using the mobile devices in the nations sectors such as:

• Affordability (customer side): The mobile devices proved offer affordability and choice, even for very low-income customers.

• Affordability (seller side): Establishing mobile masts and turrets is a relatively inexpensive way of serving large & remote in anywhere, comparing with fixed line telephony.

• Flexibility: The mobile devices can used for many facilities, which support the user for send the message, voice, video, and WAP applications (more flexible than radio/TV).

- Low Barriers to Entry: The mobile device has become in this days the most effective and easily accessible for the external and internal for all applications in the promotion of trading. The low cost of buying these devices by the user make it more flexible to have these devices in these areas. Otherwise make them within reach for even the poor areas (Bhavnani et al, 2008).

2.7   MOBILE IN MARKETING

E-marketing has become the Internet means that the dip in the achievement of marketing objectives required, and when the study correct and proper implementation. This is the way of the means to achieve the most and least expensive means of marketing such as advertising (newspapers, magazines, television stations, radio stations).Huge numbers of Internet users are increasing day by day. From day to day, we find that the companies are competing hard and attention to achieve their goals through online marketing and the spread much wider and higher sales. Particularly as the use of this invention is increasing dramatically, where the Internet has become a global supply and demand, buying and selling, without the trouble.

Mobile marketing is still in an embryonic stage of commercial deployment, most consumers have not yet had the chance to adopt and use it (Bauer et al., 2005). Service providers can speed the dissemination of this innovation. According to Rogers (1983) diffusion is the operation by which an innovation is communicated through channels over time between the members in the domain of a social system.

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Mobile phone is one of type of communication between peoples, in that the messages are concerned with new ideas. One area of mobile marketing that is experiencing this phenomenon is the mobile advertising industry. A better understanding of how information is diffused is also vital to managing the adoption of technology such as Internet and mobile phone. We use traditional ways in marketing or promotion such as printing or distrusted sheets in or newspaper promotion (see figure 2.2) compared between traditional ways and mobile marketing (Tanakinjal, Deans & Gray, 2007).

SMS marketing is just the name for marketing your service or business to new and existing customers. Right now SMS marketing provides a much more responsive marketing channel, than say email marketing or more traditional forms of advertising. mobile phone use is widespread, and usage continues to increase. And mobile phones are (generally) much easier to use than computers.

2.8 THE IMPACT OF THE USE OF E-MARKETING ON THE ECONOMY

Ecommerce or electronic commerce is the way of the future. E-commerce is an emerging industry following the same development the pattern that the automobile industry experienced 100 years ago, only faster. By the time we reach the year 2010 consumers are expect to be spending 1 trillion dollars per year through the Internet for goods and services they are now purchasing through retail outlets (Dell, 2008).

According to Michael Dell, the successful ecommerce business will combine commerce, content, and community. And whoever can figure out how to put community into the mix will rule the industry. As you may know Internet network marketers are already doing what Michael Dell predicted few years back then. For those that realize the potential of community organizations online will be the one to rule this industry. The ability to connect with likeminded people through emails, SMS technology, articles marketing, and social networking are what Michael Dell call the "successful e-commerce business."

As the first decade of the new millennium comes to close, e-commerce is still undergoing a transitionary stage. Internet which integrates the computer and tele communication technology has revolutionized the way communication is carry on daily. From one person to another. The Internet allows information to spin around the world at an ever faster rate in large quantities for cheap. The arrival of the Internet revolution is indeed good news to small businesses, and medium enterprises.

2.9 SMS IN SMALL BUSINESS

SMS can be used to grow your business, your brad and your bottom line so it can be a remarkable tool for small business; if it is used in a creative way, it can reduce you costs, increase your visibility, and improve your leads and inquiries and ultimately your sales. To successfully use this tool, it can take a trained business eye. That's where you can rely on us. It's not just the product & the solution, but what is more important is how it's implemented.

Using SMS has many great advantages and benefits for sellers over phone calls, letters (and even email), among them. It requires very little effort, it can be timed to coincide with quiet times, it is very cost effective, and creates a unique historical record of each specific communication. Used by both staff and customers are common, so very little training is required, and benefits can be achieved almost immediately.

2.10 THE USEFULNESS OF MOBILE DEVICE IN THE MARKETING

Mobile marketing is best way of marketing in world. SMS marketing is first time available in market in 1996 and now this is one of easiest method to contact with customers. In mobile marketing, when we use this method we contact big numbers of customers send a message to all of them. This all done by computerized software by using Internet and SMS mobile phone (Leppaniemi, 2008).

Now days are going to more competitive day by day and business needs to be solid marketing in cheap way and that directly connect to people. In this approach, SMS

marketing was came in tradition (Michael & Salter, 2006). SMS marketing contains much type of activities that may engage user to give them feedback in response of marketing. Some of are voting, win contest, promotional plans and times vouchers.

2.10.1 THE BENEFITS OF THIS SERVICE

I. To assist our customers to provide a promotion and a practical and effective marketing by the most modern techniques of short messages.

II. Collective direct transmission of short messages on the way at the request of the customer.

III. The transmission of mass SMS through the electronic or computer system.

IV. The availability of private channels to customers through short codes or numbers for the regular feature of the response and demand.

V. Design promotion and advertising campaigns through SMS.

VI. The provision of specialized databases to the needs of the customer.

2.10.2 ADVANTAGES FOR THIS METHOD

I. The identification of the region to be targeted.

II. Determining the gender you want to target, or both.

III. The arrival of the announcement to interested segments of the promotion.

IV. High speed in the delivery of the promotion does not exceed the most accurate.

2.11 MOBILE SERVICES WITH TOURISM GUIDE

Guidebooks services provides the users and other customers who interest in using the mobile devices for their enquire or searching on the various information that Guidebooks can provide. The two quintessential tourist publications are the guidebook and the map by the Organization for the Advancement of Structured Information Standards (OASIS, 2004). These are often used in combination when tourists navigate and find out about what to do in different places and how to get between them. While guidebooks have been given some attention in tourism studies, they have generally been seen as texts to critique. There is little discussion of how guidebooks become incorporated into activity (IBM, 2006).

Mobile tour guides are the result of years of research in the areas of recommenders, ambient intelligence and pervasive computing. Cyber guide (Abowd, 1997) was one of the first mobile tour guides. Personal preferences are not analyzed to compute a tour plan but the user can retrieve information or request a route to a desired Point of Interest (PoI). GUIDE (Cheverst, 2000) is a mobile tour guide very similar to the hereby presented Dynamic Tour Guide (DTG) (Kramer, 2005).The visitor chooses attractions from various categories. These attractions are then sequenced taking into account the opening hours, best time to visit and the distance between attractions. The sequence can be modified manually. Navigation is achieved by a map with a list of instructions. Differences to the DTG are the use of cell based positioning instead of GPS and the selection of concrete sights instead of deriving the selection from generic preferences.

The Crumpet project is one of the few projects having performed a usability evaluation for its personalized, location aware multi-agent system, which recommends tourist attractions and provides interactive maps and directions to find a selected sight. Users had to complete several tasks observed by a research assistant.

According to Svanas D. (2001), this study present the variety of mobile devices is growing and the users expect to be able to use the same or the same kind of services on the different devices. Otherwise the study provide the methods to locate the user location, however these technical and service infrastructure may differ and they may even change.

According to Davies et al. (1998), these methods can give the facilities to the users from the point of view of the service; the simplest method of locating the user is to let him tell the location. From the point of view of the user, this method requires extra effort because the user needs to define his/ her location and input it to the system as a part of the search.

2.12 MOBILE APPLICATIONS WITH TRANSPORTATION

According to Barbara, (1999), Dunham (1995), Imielinski and Badrinath (1994), in these days the mobile device are rapidly growing and spreading their application areas, the useful application and the attractive services could help to supporting human activities in outdoor environment is one of the principal applications of mobile computing.

According to Koichi and Yahiko (2003), Bhattacharyya (1997), the study preset the mobile transportation to determine the user location in order by using some function to calculate the user destination and mapping the current user location. This function is very useful for visually or aurally handicapped passengers because the guide information is given by visual or voice messages in the public transport and these passengers cannot use some of them by Goto, K., & Kambayashi, Y. (2002).

This study can provide the gap of the tourists during the travel the mobile terminal has the concrete travel plan and tickets of the passenger. The mobile terminal gets the several information such that the current location of the passenger, operation schedule of vehicles, information about the facilities of stations and so on. During the travel, the mobile terminal checks the travel plan and offers the passenger appropriate guidance as the human attendant behavior (Cheverst, 2000).

2.13 MOBILE WITH OTHER APPLICATIONS

According to Kushchu & Kuscu (2003) they illustrated the differences between telecommunication services based on the traditional, i.e. RPC-based client server paradigm, and service implementations based on mobile service agents. They also discuss architectural principles and requirements of a distributed agent environment supporting mobile service agents. To show the benefits of mobile agent technology and specifically its application for the realization of mobile application.

However M-government services provide the most services that requires to other fields. The technology and the services landscape presented above are slowly taking its place in various m-government implementations. Some of the early adopters of m-government services include law enforcements, fire fighting, emergency medical services, education, health and transportation (Heide, 2003).

According to Imielinski, T. & Badrinath, B. (2005), mobile advertising or marketing in the context of pervasive computing environments presented a list of challenges and possibilities as well some ideas of solutions for advertising in pervasive environments. The challenges include: reaching the people with the right advertising, delivering advertises at the right time, serendipitous advertising or promotion on sales, means for users to follow up on the advertise, and how to collect revenue for advertises.

2.14 CONCLUSION

The main features presented in this chapter to provide the reader with the highlight on the aim of this research, otherwise this chapter discussed related literature review to the issue of mobile technologies and its applications in the marketing and promotion field in any country which proved that application of Mobile commerce services with the useful accessing the information by the mobile devices.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research methodology is more than just collections of method to perform a research; it is a systematic way to solve the research problem. The research methods refer to the methods and techniques used by the researcher in doing the research, for example, data collection technique, data processing techniques and instruments. The research methodology used in this study is a General method, excellently chosen, described and accepted among many researchers in Information System Research Design (Vaishnavi & Kuechler, 2007).
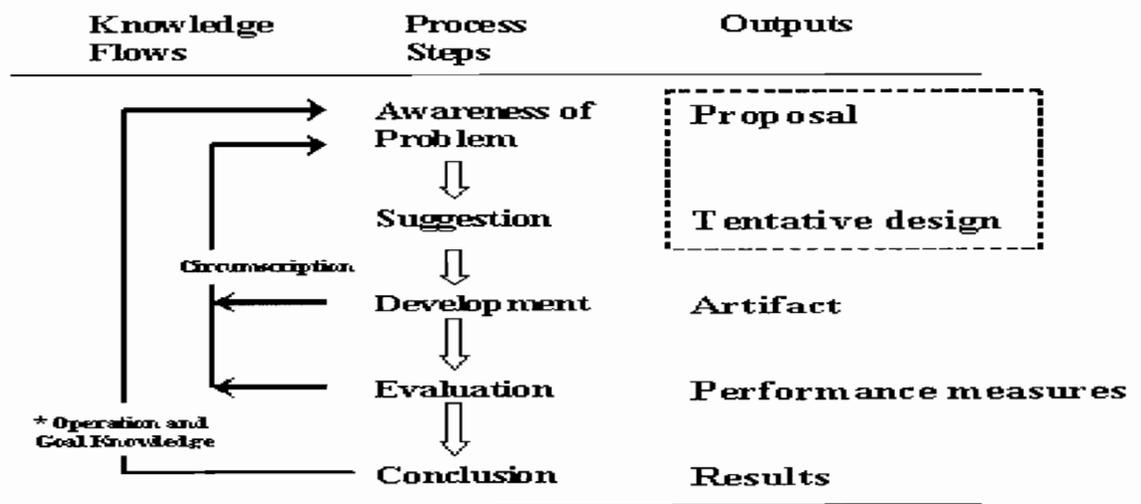

Figure 3.1: General Methodology of Design Research (Vaishnavi & Kuechler, 2007).

3.1.1 AWARENESS OF PROBLEM

Awareness of Problem is a phase of exploring potential research topics in a chosen domain, and the understanding of the problem which needs to be solved. In fact, the selection of domain was decided during this phase through discussion and related reviews of similar for WAP/WEB Application and SMS technology product on sales for supermarkets.

As shown in (Fig. 3.1), the proposal is the output of this phase, Data gathering is also part and partial of awareness of the problem; firstly to come up with the objective of this study listed, we have to understand the research domain. For this research, the research domain is the all peoples (sellers and buyers), literature review will carry out. During the literature review stage, ideas, information, issues and problems related to all sellers and buyers will gather. The information will be gathered and collected and reviewed from books, proceedings, journals, white paper, reports and news.

3.1.2 SUGGESTION

In order to develop a well-design for WAP/WEB application and SMS to products on sales reductions on sale for supermarkets, one of the major influences on the quality of the systems developed is the software development approach adopted. A methodology consists of an approach to software development, a set of techniques (e.g. SMS tools) that support the approach to structure the development process and unifying set of procedures to structure the proposed requirements model.

As information systems requirements are becoming increasingly complex, the use of object orientation approach is more necessary. Object oriented offers conceptual structures that support the sub-division in the system. It also aims to provide a mechanism to support the reuse of program code, design and analysis design.

3.1.3 DEVELOPMENT

The model is a simplification of the transactions, which will use a precisely defined signs and notifications to represent and simplify a structure and the relationships of the system. The model will create to avoid complexity and to act as a guideline in developing the system prototype in order to make the prototype easier to understand and reusable.

The system prototype will develop using PHP language, and I will use HTML language. MySQL will use to build the prototype database to store all buyers' information; sellers in the can use the prototype to reduction for products. And contact with Clickatell Company in United Kingdom to supply this service to send SMS.

3.1.4 EVALUATION

The evaluation will perform to determine the level of functionality and operability of the system prototype after the prototype has been developed; it is tested based on the list of requirements. The aim is to see the level of functionality and operability of the prototype system.

The research will employ two techniques to evaluate and test of the sellers inside the institute: the first technique is the use case testing to minimize prototype from bugs and errors; this technique is necessary since the use case testing will be performed on the interaction of the entire dialog components when all the components are combined for the first time. The second technique is User Testing (questionnaire) to rate the user satisfaction with the E-marketing by SMS technology system and to evaluate the system in several dimensions.

3.1.5   CONCLUSION

The WAP/WEB and SMS applications for people in any country in this world will develop in order to enhance the services performance and increase its customers' satisfaction. In addition this WAP application an SMS technology can promote the customers convenience by offering a mobile services for buyers to see the all products and reductions and any change on price or if any new product in supermarket, such as: the new price after reduction, big sales, new product, maybe news in supermarkets such as celebrations in malls, local announcements, and local job chances. Which can be available anywhere anytime even if you set in your house.

Implementing this prototype will return in many benefits for both sellers and buyers and the WAP users at the same time. Through this prototype the users save time and effort and keep them informed of their in formations details anywhere anytime. Some work

and further studies still need to be conducted for this WAP/WEB application and SMS technologies in order to make it more functional and reliable such as expanding and generalizing the model to include all communities.

3.2 CONCLUSION

In conclude, after requirement identification is a major phase in the prototype, and also understanding the objectives and the scope of study, as well as the problems which are to be solved. The requirement of the system gathered using two techniques Interview and review of the current system. After defining the problem statement, the objective and the scope had been defined clearly. And I will use web technology and SMS tools to solve this problem and I will use interview with sellers and buyers to determine the problem, all data that gathered from questionnaire were analyzed by using the Statistical Package for the Social Sciences (SPSS) program. Data analysis is carried out in the form of descriptive statistic. The analysis of the data that gathered from the questionnaire will be discussed in chapter five.

CHAPTER FOUR

ANALYSIS AND DESIGN

4.1   INTRODUCTION

The aim of this chapter is to provide a highlight about the system functionality which identifies the functional requirements and the non functional requirements, the UML diagrams will present in the analysis and design part from this chapter by identify the, use case diagram, class diagram, sequence diagram, collaboration diagram, and the activity diagram. The next part of this chapter will focus on the implementation and testing of the system by identify the use case test, and by provide the questionnaire result for the system feasibility. The end of this chapter will provide the conclusion in order to determine the purpose of this chapter.

4.2 FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS

4.2.1 Functional Requirements: Administrator Requirements

- The system will classify to the administrator, need to login by his or her username and password that make them able to access their pages.

- The purpose of the administrator in this system will focus on manage the customer by add, delete, and edit customer information. The administrator requires to login by his username and password to obtain manages the customer information.

- The administrator can also manage the promotion by add promotion, delete, and edit details about item.

- The system will support the customer to view the promotion; otherwise the customer has the ability to view the other reductions.

- The administrator can be able to change his or her login information that the system provides, the administrator can not change his or her login information without the login to the system.

- The system will support the administrator to send SMS to any customer to tell him the new promotion.

- The administrator can be able to view old SMS promotion.

4.2.2 NON-FUNCTIONAL REQUIREMENTS

Non-functional requirements describe all aspects in optional way. Our project determines some of this requirements that help system to achieve its goal clearly and rapidly.

- **Usability**: The system should be easy to use from all the seller and trader users.
  I.   The system should be clearer for the user in these areas by provide them with the appropriate guide to the system.
  II. The system should present the easy functions that make the user able to practice his or her activities on his or her page.

- **Performance**: The system should response in an optimal time, without any delay or non-consistency in database.
  I.   The system should present the error messages to the users to notify him or her about any lack in the system during the administrator practices.
  II. The system should to notify the administrator about the system lack and the system performance by generate these errors and come out with the useful suggestions.

- **Reliability**: The system must not generate errors when used probably on its operational environment. The system must provide the users of the system with the flexibility to detect the alternative solutions during the lack.

- **Privacy**: Information in this system is confidential, only approved administrator can access this information; the privacy of such information is an important factor in the process.

- **Completeness**: The system should be compatible with current systems.

- **Safety and security**:

  I. The system should prevent illegal access to the database, while marinating a high level flexibility.

  II. The system should reject any person whose ID is not identical to the one which stored in the database.

4.3 USE CASE DIAGRAM

According to the use case below will show how the system components work and the job for each one in this system, the system will present the administrator to manage the customer information by add, delete, and update the customer information, the system will support the administrator to add the promotions details by upload all promotion details and then send them details to the customer by SMS to the database of the system. The system will give the ability to the administrator to login to the system by his or her username and password and change the login information after the login to the system. The system will support the administrator to send SMS and view old SMS.
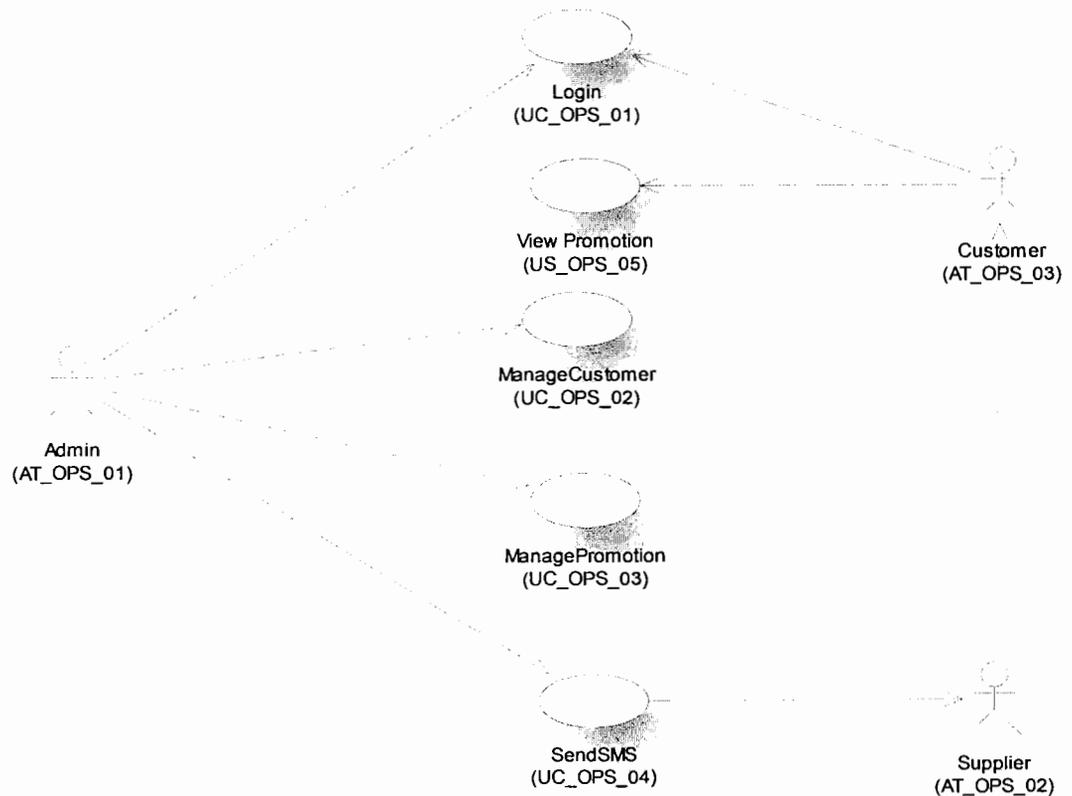

Figure 4.1: Use case diagram for the proposed system.

4.4 USE CASE SPECIFICATION

4.4.1 Use Case Specification for Login

Admin
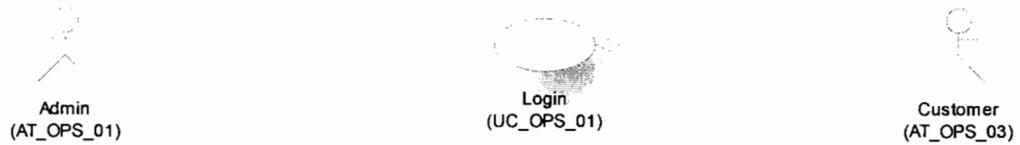(AT_OPS_01)

Login
(UC_OPS_01)

Customer
(AT_OPS_03)

Figure 4.2: Use case specification for login.

Brief Description	• This use case will be used to allow administrator and the customer to access his or her page in order to customer by WAP.
Basic Flow	• The administrator and the user need to insert his or her username and password. • The administrator needs to confirm the login process by press the login button. • The system will respond to his or her order by verify the login information. • The system will send them to his or her page.
Exceptional Flow	• Wrong username and password. • Refill the login fields.
Pre-Conditions	• The administrator must login to his or her account by the login username and password.
Post-Conditions	• Administrator can access his or her page.

4.4.2 Use Case Specification for the Manage customer

Admin
(AT_OPS_01)

ManageCustomer
(UC_OPS_02)

Figure 4.3: Use case specification for the manage customer.

Brief Description	• This use case will be used by the administrator to support him by add, delete, and update the customer information.
Basic Flow	• The administrator can add new item to the system by select the add customer. • The system will respond to his order and will show the add customer information fields. • The administrator now require to fill the customer information and press the add button. • Otherwise the administrator can delete any customer information from the system by select the delete customer and press the delete button to confirm the delete operation. • The administrator can edit customer information by select the edit operation, after that the administrator requires to modify the customer information and press the edit confirm the change process.
Exceptional Flow	• Wrong entries • Refill the update customer fields • Select customer
Pre-Conditions	• The administrator need to login to the system by his or her username and password. • The administrator need to fill the manage customer fields.
Post-Conditions	• Add success • Delete success • Edit success

4.4.3 Use Case Specification for Manage Promotion

Admin
(AT_OPS_01)

ManagePromotion
(UC_OPS_03)

Figure 4.4: Use case specification for Manage promotion.

Brief Description	• This use case will be used by the administrator to support add, delete, and update the promotions.
Basic Flow	• The administrator can add new promotion to the system by select the add promotion. • The system will respond to his order and will show the add promotion fields. • The administrator now require to fill the promotion information and press add. • Otherwise the administrator can delete any promotion information from the system by select delete promotion and press the delete button to confirm the delete operation. • The administrator can edit promotion information by select the edit operation, after that the administrator require to modify the promotion and press edit button to confirm the change process.
Exceptional Flow	• Wrong password • Fill the password fields
Pre-Conditions	• The administrator need to login by his or her username and password to the system.
Post-Conditions	• Add success • Delete success • Edit success

4.4.4 Use case send notifies message:

Admin
(AT_OPS_01)

SendSMS
(UC_OPS_04)

Figure 4.5: Use case send notifies message

Brief Description	• This use case will initiate by the Admin after that will be able to send notify message to Customer.
Basic Flow	• The Admin should press send message button to be able to send notify message. • The system shall display send message page on the screen. • The Admin should write notification message after that press send. • The system shall response to the request and send notify message. • Admin can send another notify message.
Exceptional Flow	• Wrong entries
Pre-Conditions	• The admin must login successfully by using his/her username and password to send notification message.
Post-Conditions	• Send success.

4.4.5 Use Case Specification for Mange message:

Admin
(AT_OPS_01)

SendSMS
(UC_OPS_04)

Supplier
(AT_OPS_02)
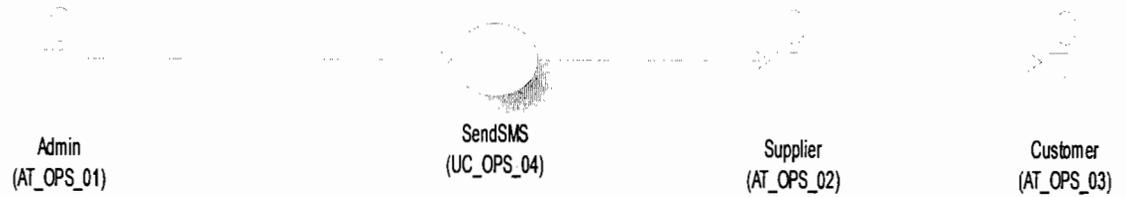
Customer
(AT_OPS_03)

Figure 4.6: Use case specification for Manage Message.

Brief Description	• This use case will initiate by the Admin after that will be able to send notify message to Customer. • The system able to send SMS to the supplier and then supplier send this SMS promotion to the customer.
Basic Flow	• The customer able to check message. • After that the message with manage of supplier send message. • The system will respond to the user order and will save the data the message send in the system database.
Exceptional Flow	• Refill the message fields
Pre-Conditions	• The admin need to login by his or her username and password to the system. • Fill the message fields.
Post-Conditions	• Send success

4.4.6 Use Case Specification For view promotion:

View Promotion
(US_OPS_05)

Customer
(AT_OPS_03)

Figure 4.7: Use case specification for Manage Message.

Brief Description	• This use case will be used to allow customer to see promotion.
Basic Flow	• The customers no need to insert his or her username and password. • The system will send them to his or her page.
Exceptional Flow	• Refill the login fields.
Pre-Conditions	• The customer can access without username and password.
Post-Conditions	• The customer can access his or her page. • Access success.

4.5 SEQUENCE DIAGRAM

4.5.1 Sequence Diagram for Login

In this process, the actor will present the administrator need to login to his or her account by the username and password.
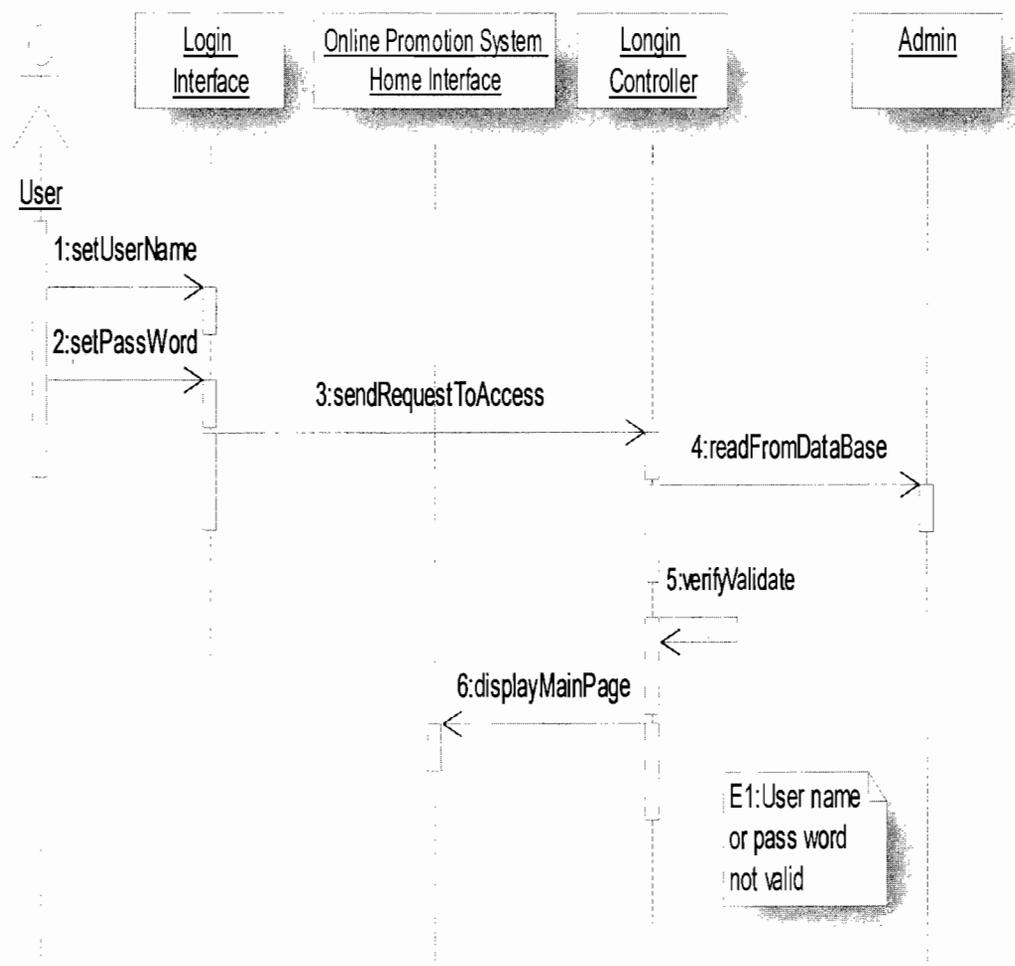

Figure 4.8: Sequence diagram for login.

4.5.2 Sequence Diagram for Mange customer: The admin in this operation can add new customer to the system.
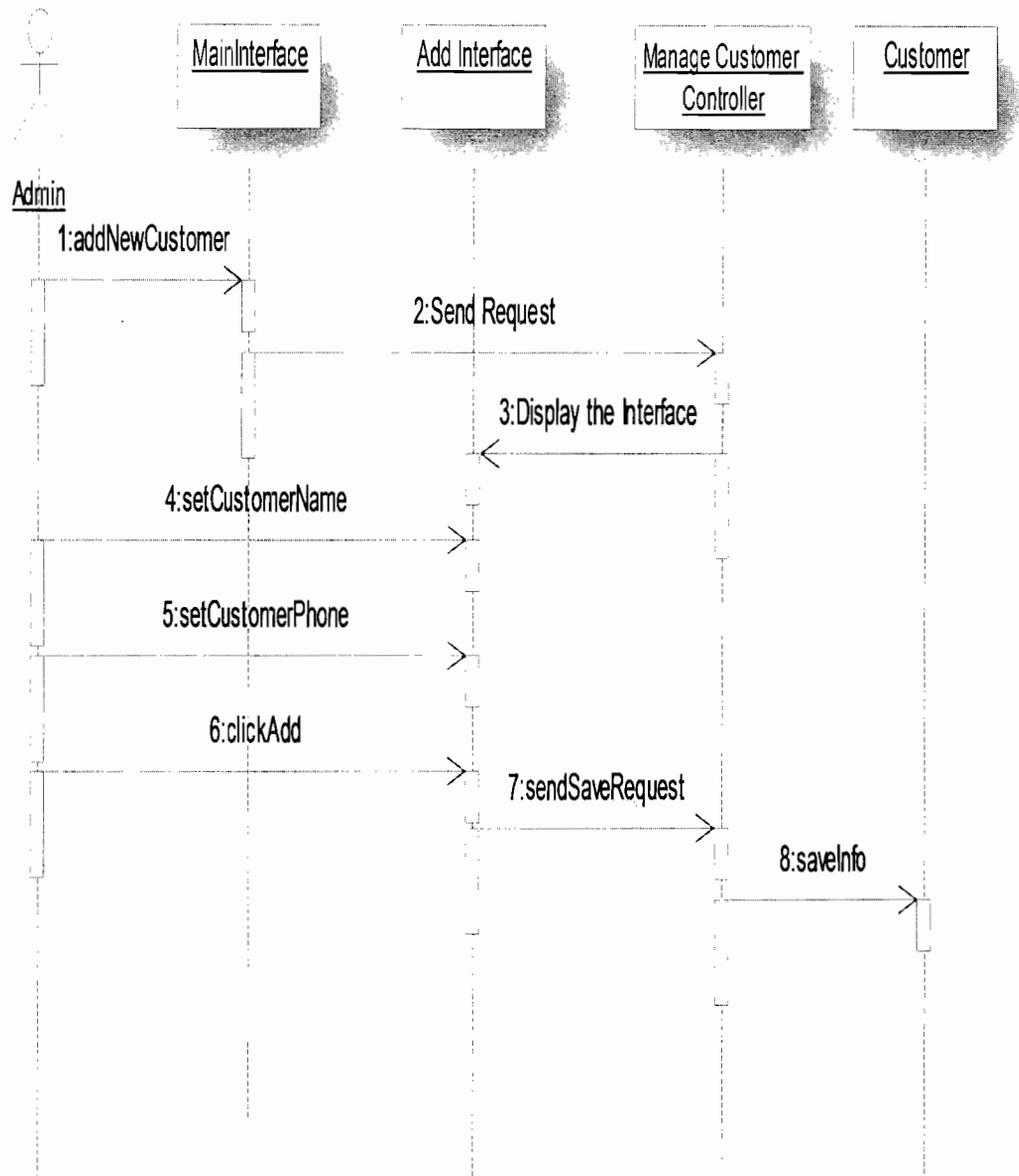

Figure 4.9: Sequence diagram for Manage customer.

4.5.3 Sequence Diagram for add New Promotion:

The admin in this operation can add new promotion to the system.

```
                  Promotion          Promotion              Promotion
                  Interface          Controller

Admin
  1:clickAddNewPromotion
          ──────────────>
                         2:sendRequest
                              ──────────────>
                         3:displayField
                              <──────────────
  4:setPromotionPrice
          ──────────────>
  5:selectPromotionItem
          ──────────────>
  6:setStartDate
          ──────────────>
  7:setEndDate
          ──────────────>
  8:clickSave
          ──────────────>
                         9:sendSaveRequest
                              ──────────────>
                                              10:saveInfo
                                              ──────────────>
  E1:Missing          11:updateInterface
  Info                    <──────────────
```
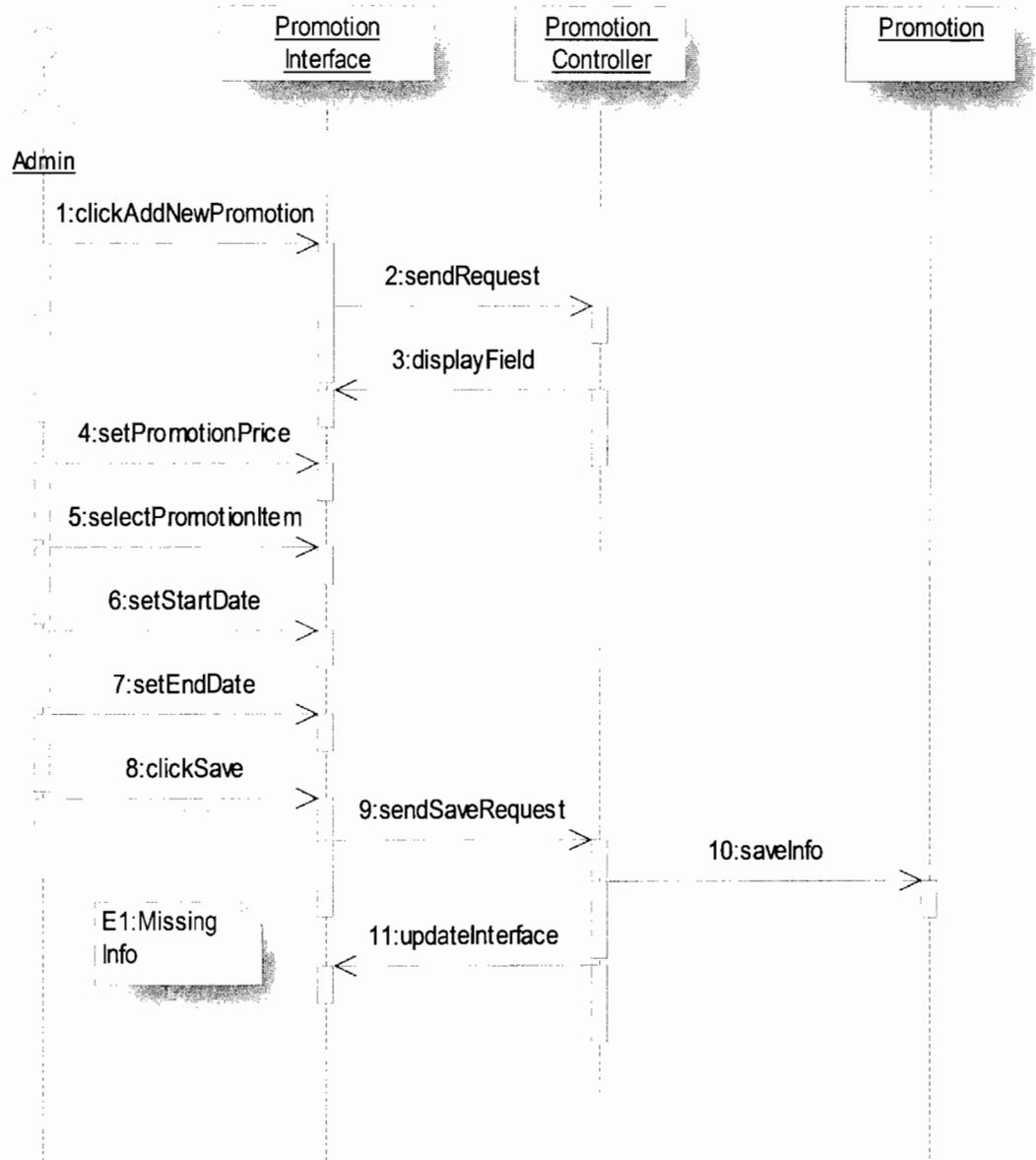
Figure 4.10: Sequence diagram for Add new promotion.

4.5.4 Sequence Diagram for delete promotion: The admin in this operation can delete promotion from the system.
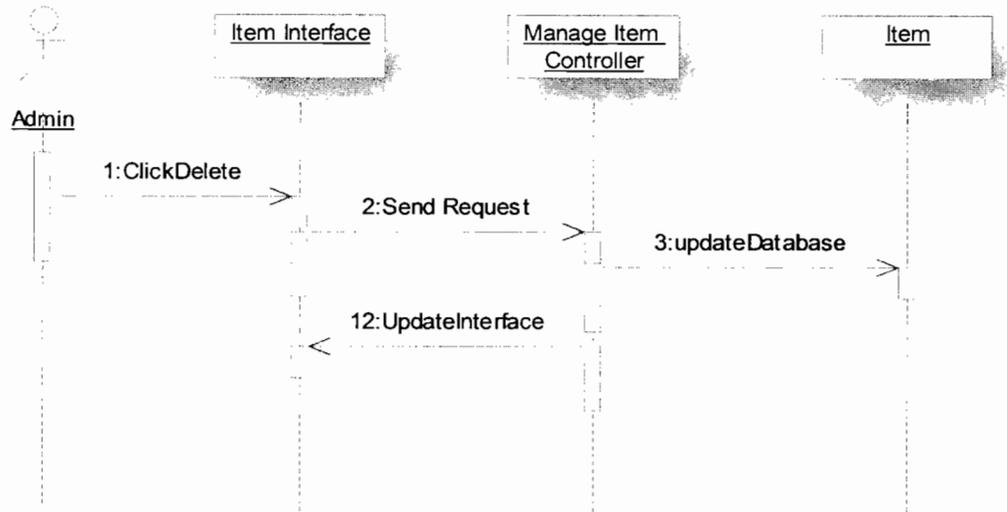

Figure 4.11: Sequence diagram for delete promotion.

4.5.5 Sequence Diagram for view promotion: The customer in this sequence diagram can to view the promotion available in supermarket.
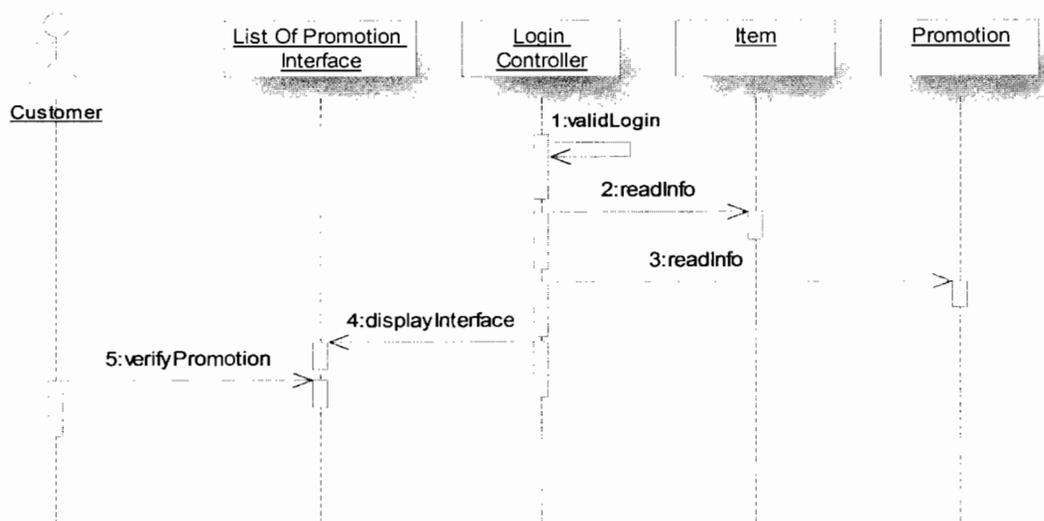

Figure 4.12: Sequence diagram for view promotion.

4.5.6 Sequence Diagram for notifies message: The admin in this operation can select

promotion and then the system send this message to the customer.

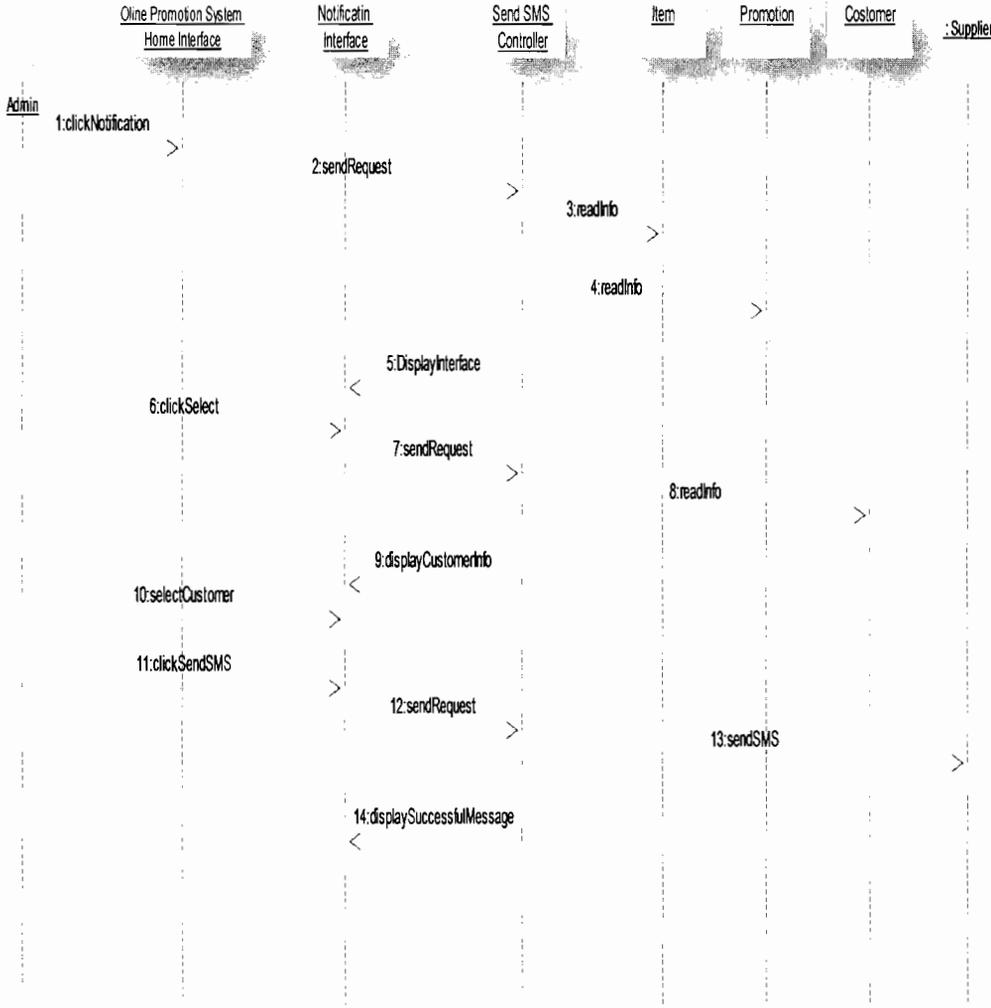**Figure 4.13:** Sequence diagram for send SMS.

4.6 CLASS DIAGRAM

According to the class diagram below we can simplify the class below to five main class, these classes will present all of the administrator, user, reductions, guest, and the local reductions system which will control all of the components database tables in the system.
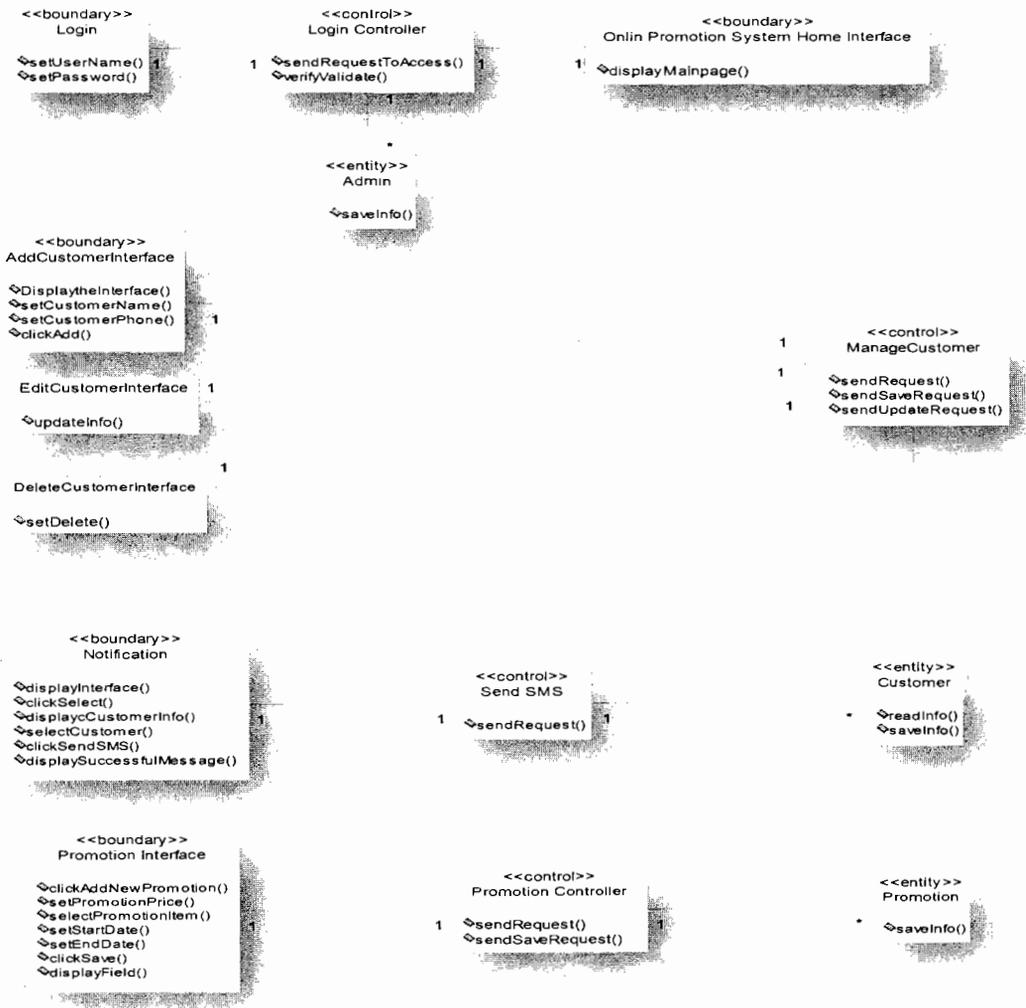
Figure 4.14: Class Diagram for the proposed system.

4.7 DEVELOPMENT:

4.7.1 Online Promotions System Architecture

Mobile promotions for sellers and buyers service becoming a prominent leader in integration of information technology into applications. Wireless communication technology provides the pre-eminent infrastructure for implementing mobile Reductions service application. Reliable and secure information sharing using a wireless communication environment is a key in marketing or promotion and any business applications.

Figure 4.15: WEP/SMS Architecture (Scholz, 2008)

4.7.2 Hypertext Preprocessor (PHP)

The World-Wide Web has evolved into the major data structure for providing and accessing computer applications and other resources though well-defined WEB-enabled interfaces. To develop such interfaces it exists sever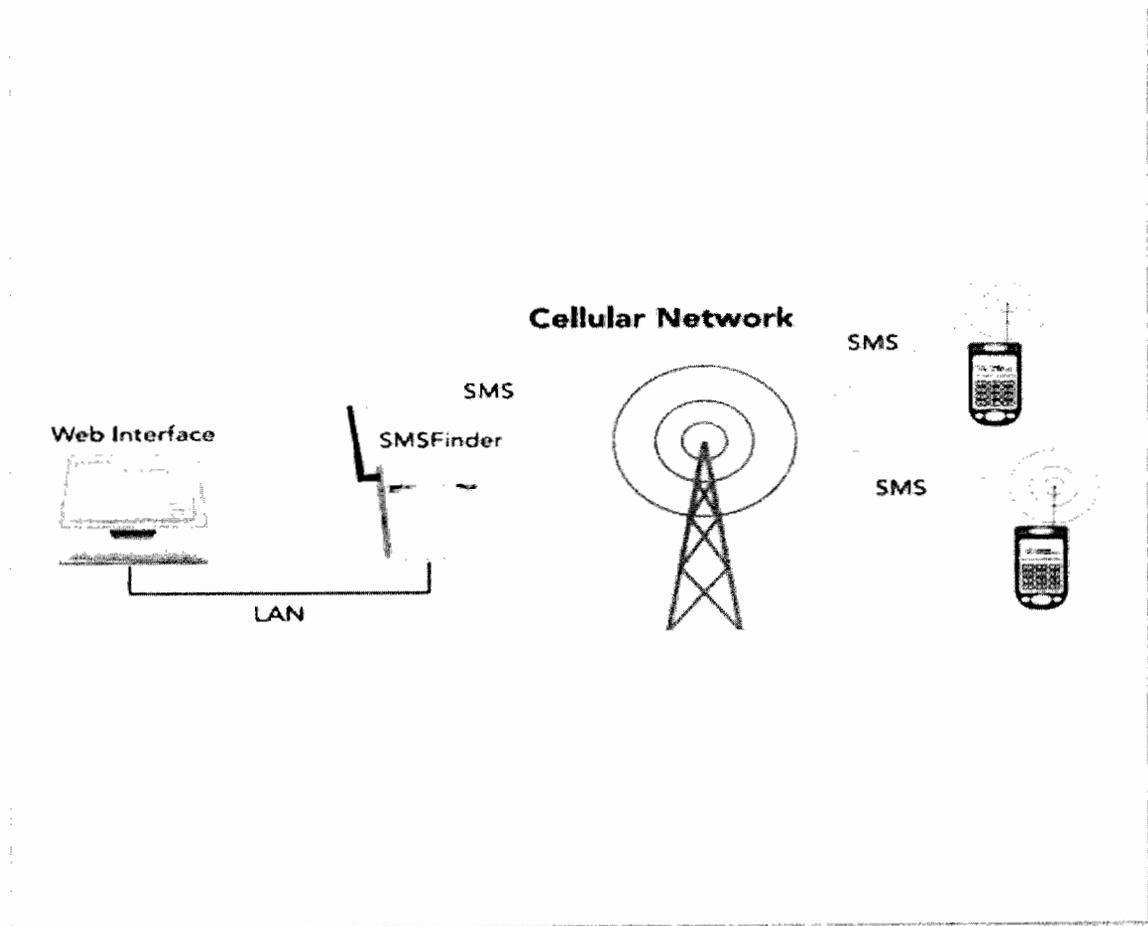al emerging technologies. In practice, we meet HTML-based interfaces and WAP-based interfaces. The first one facilitate the communication between devices such as Personal computers and laptops and the second one support the communication in environments involving handheld devices such as PDAs and pocket PCs. Recently, we further have the ability to use programmable interfaces, relying on the standard WEB Services architecture. We specifically focus on incorporating in such global computing environments small GSM-enabled sensor devices, controlled by SMS messages (Skolar & Trachtenberg).

Hypertext Preprocessor (PHP) a scripting language used to create dynamic Web pages. With syntax from C, Java and Perl, PHP code is embedded within HTML pages for server side execution. It is commonly used to extract data out of a database and present it on the Web page. NT/2000 and Unix Web servers support the language, and it is widely used with the MySQL database (Robbins, 2006).

4.8 SYSTEM TEST (Online Promotion System):

4.8.1 Login Page: from this page the administrator need to username and password to login to the system.
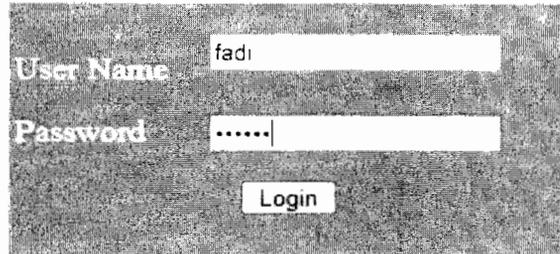
Figure 4.16: Login Page.

4.8.2 Add new promotions: from this page the Admin able to add new promotions.

Figure 4.17: Add new promotion

4.8.3 Edit Promotion: from this page the admin able to edit promotions.

Figure 4.18: Edit promotion.

4.8.4 SMS Page: This page display list of number available and the admin able to select any number (one or more) to send SMS promotion and the Admin able to select promotion from the list of promotion.

Figure 4.19: SMS Control.

4.8.5 Add new customer: From this page the Administrator able to add new customer.
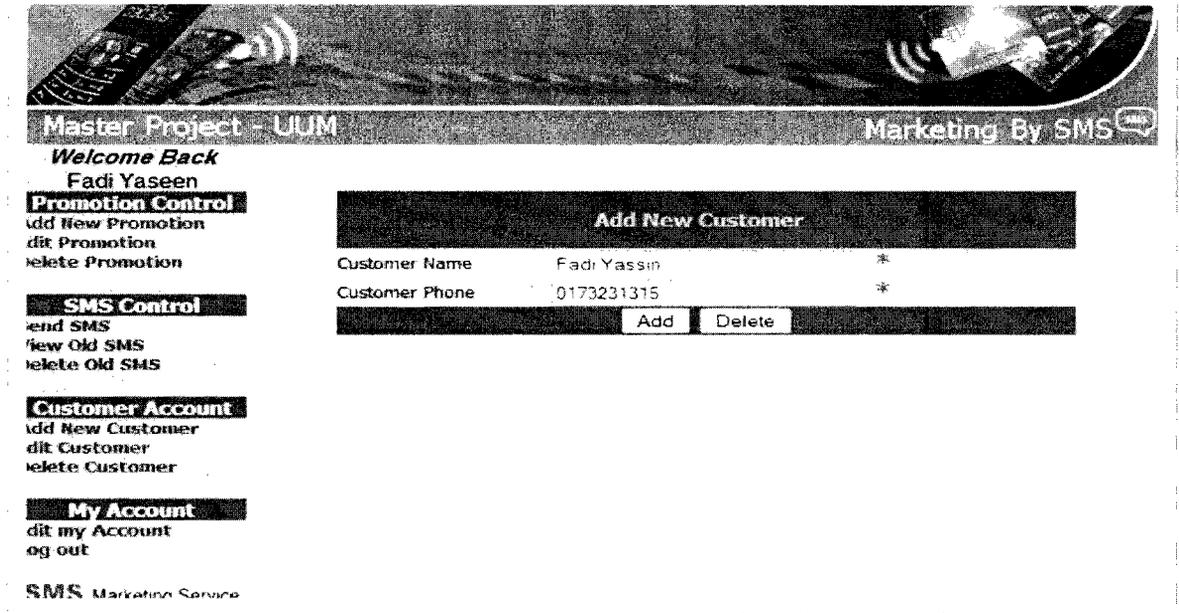
Figure 4.20: Add new customer.

4.8.6 Edit customer: from this page the administrator able to edit customer information.
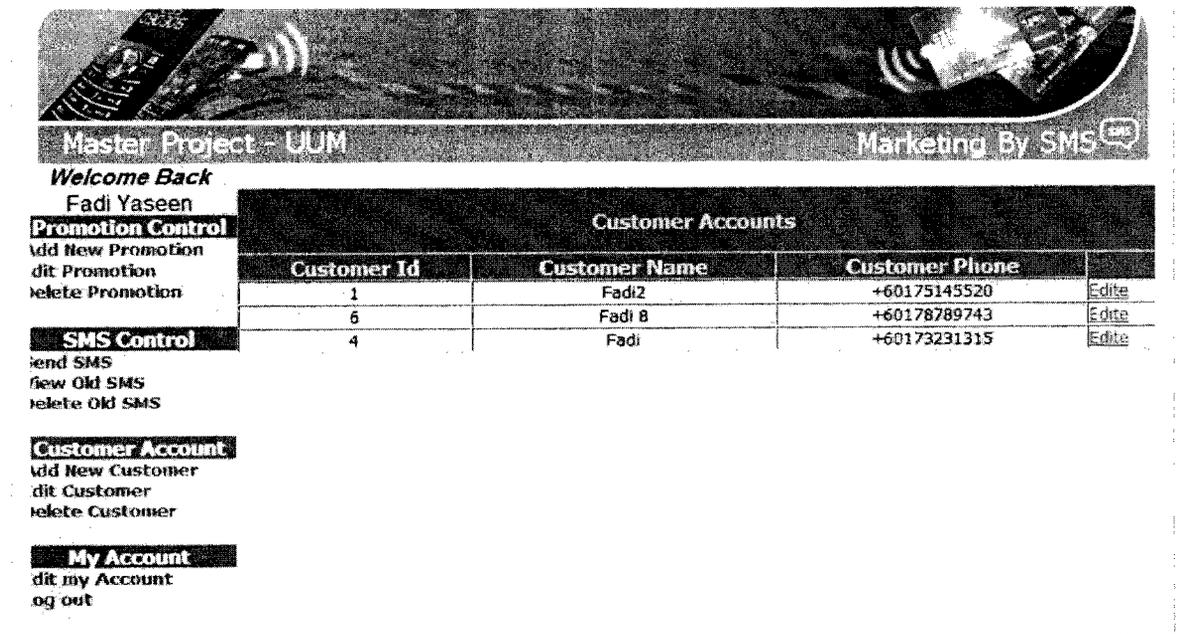
Figure 4.21: Edit customer

4.8.7 Edit account: from this screen the administrator able to edit account (name, login name, e-mail and password).
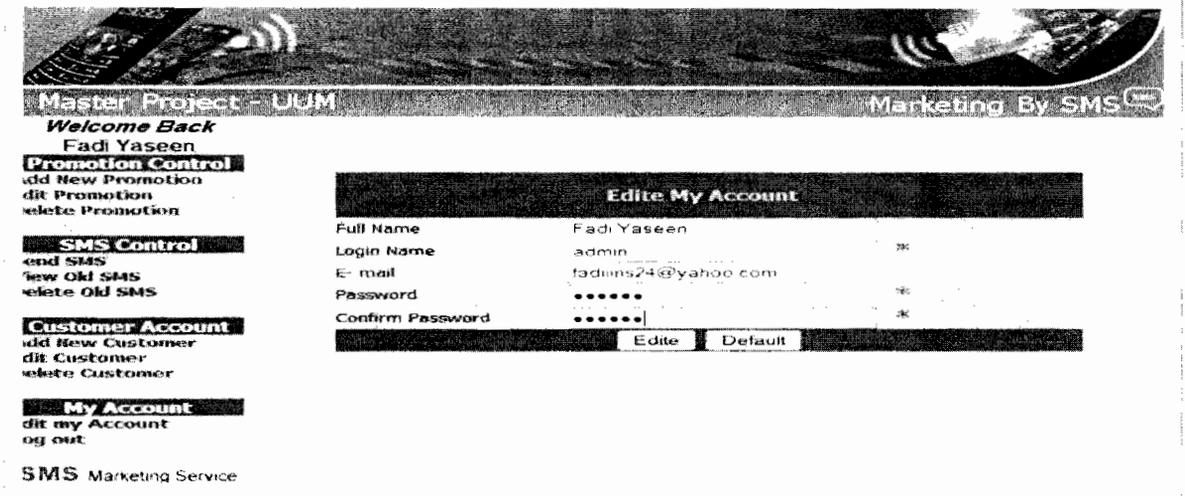
Figure 4.22: Edit account

4.8.8 WAP Screen: the first screen the customer can access to the Web by click start to access to the web and view the SMS who administrator sent it to the customer and then the customer can see the promotion (see figure 4.23)

| 1 | 2 | 3 |
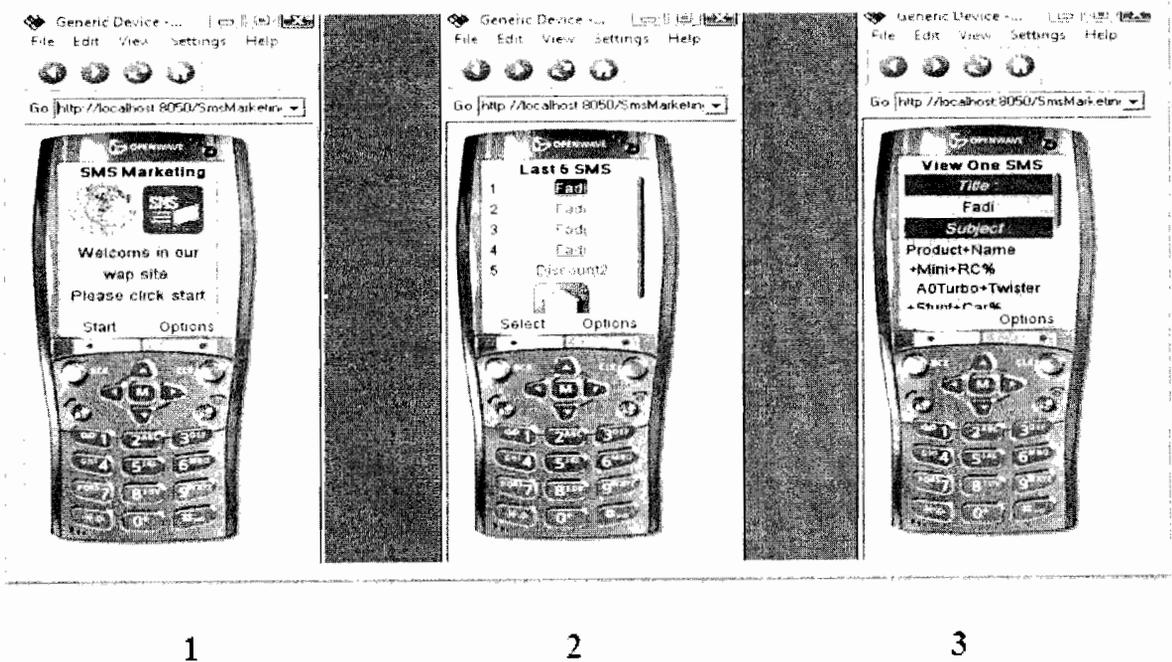
Figure 4.23: WAP pages

4.8.9 Screen customer mobile: from this screen SMS promotion on the customer mobile. The customer can able to read it and access by WAP to see another promotion.
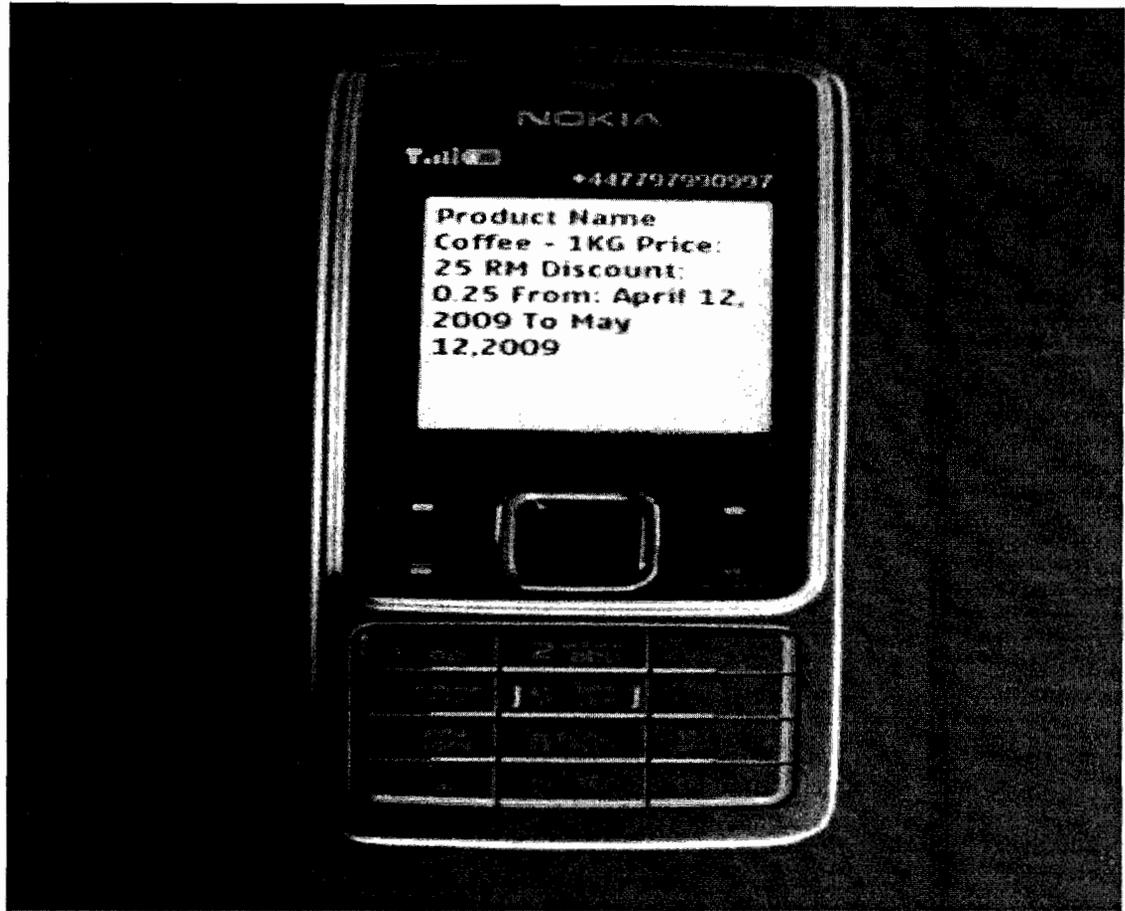
Figure 4.24: SMS on customer mobile

The errors can be prioritized into high, medium or low:

- **Low priority:** Aesthetics, Message wording, Menu options, Wrong alarms, Help problems etc.

- **Medium priority:** When an error occurred leads to another error resulting in a variation in the functionality.

- **High priority:** When the application completely stops, the system gets hanged etc.

CHAPTER FIVE

DISCUSSION AND EVALUATION

5.1 INTRODUCTION

This chapter will present the design of the questionnaire and the analysis methods that used to involve the usability of the study, this chapter will explore the using of SPSS 16.0 to analyze the collected information from the questionnaire.

5.2 USABILITY TESTING RESULT

According to Ravden and Johnson (1989) defined usability as the extent to which an end-user is able to carry out required tasks successfully, and without difficulty, using the computer application. Usability, in turn, can be decomposed into a number of attributes. According to Nielsen (1993), usability is a multidimensional concept that is traditional associated with five attributes learns ability, memo ability, efficiency, errors, and subjective satisfaction.

In the case of this study, to test the usability of the utilization the SMS Mobile promotions by evaluated through doing a questionnaire to evaluate the one area. Then, attitude toward use predicts the behavioral intention to use.

Finally, intention predicts the actual use of those techniques (Davis, 1989). The questionnaire's questions for the SMS Mobile Promotions, the study included 50 samples and the results of this study are follows:

Table 5.1: Demographics Data Summary for Gender.

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	28	56.0	56.0	56.0
female	22	44.0	44.0	100.0
Total	50	100.0	100.0	

Table 5.2: Demographics Data Summary for age.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	26-34	28	56.0	56.0	56.0
	35-44	10	20.0	20.0	76.0
	45-54	7	14.0	14.0	90.0
	above 55	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

Table 5.3: Demographics Data Summary for marital status.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	married	14	28.0	28.0	28.0
	single	36	72.0	72.0	100.0
	Total	50	100.0	100.0	

Table 5.4: The Descriptive Statistic for all the Questions.

	N	Minimum	Maximum	Mean	Std. Deviation
Q1	50	1.00	4.00	2.4800	1.05444
Q2	50	1.00	5.00	2.2000	1.06904
Q3	50	1.00	4.00	2.1400	1.04998
Q4	50	1.00	5.00	1.8800	.89534
Q5	50	1.00	5.00	2.0200	1.02000
Q6	50	1.00	4.00	2.1000	.86307
Q7	50	1.00	4.00	1.9400	.97750
Q8	50	1.00	5.00	2.8600	1.16075
Q9	50	1.00	5.00	2.3400	1.15370
Q10	50	1.00	5.00	2.4400	1.40204
Valid N (list wise)	50				

According to the shown result, the agreement between the different answered, however, the highest agreement between the provided information by the SMS and WEB/WAP technology, whereby the result of the mean and the Std.deviation was (mean=2.8600, SD=1.16075), however the high agreement about the tools and the easier to use the mobile application in the promotion (mean=2.2000, SD=1.06904).

Most of the points about if this system developed will facilitates the promotion process and help the Sellers and Customer in marketing or promotion about presented 70% from answers in question number three., most of the answered about 90% from people answer me in these days its easy to access to informations by using mobile phone, this answer helps this reaserch in this domain. The facilities to get the promotion. 88% from answers are interested to recieve messages about the daily promotion through mobile phone. 80% from the sample answer them about the useful system for the sellers and the buyers in question number seven.
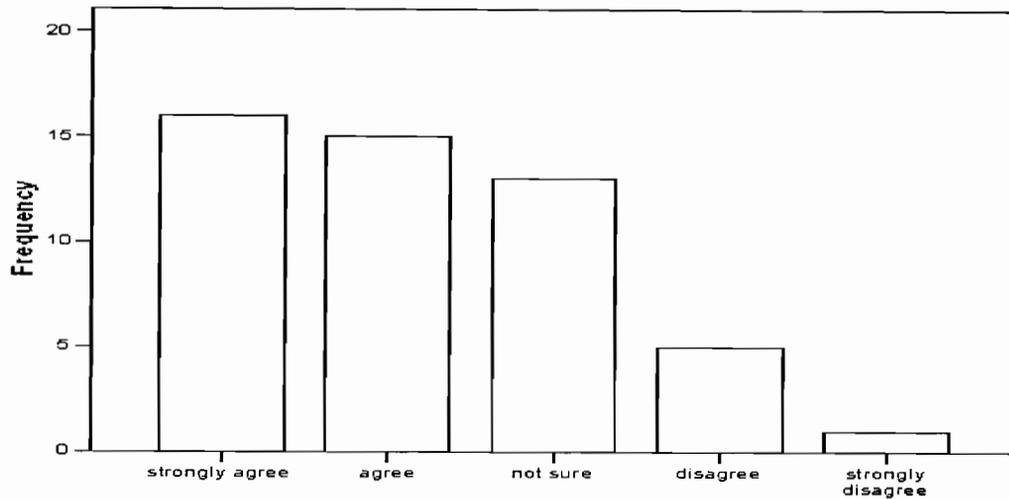
Figure 5.1: the Question high Agreement.

The evaluation of the benefit and the user satisfaction was highest agree that mobile can provide the benefit and easy to use by those people 84% in section about use of the mobile phone in promotions and marketing and include kinds of products, the customer feel satisfied and save effort and time.

5.3 CONCLUSION

This Evaluation takes focus on the development process and can uncover usability deficits early during the design. In future works, more usability tests for the redesign application with use SMS in promotion and in future develop this prototype to include MMS. Interviews with sellers and customers and evaluation to reach more people will help to shape application and better meet the user's opinion, requirements and expectations. The overall results were encouraging but improvement is definitely needed.

CHAPTER SIX

CONCLUSION

6.1 INTRODUCTION

This chapter will conclude the study by summarize and review the findings that found from the study and presenting research contribution, problems and limitations, and the direction of the future works.

6.2 CONCLUSION OF THE STUDY

As was explained though chapter one, the objectives of this study are to develop the prototype and do usability testing. As well as producing requirement model for SMS Mobile Application for Promotion Product on sale for supermarkets by using WEB/WAP.

The prototype will help the peoples (seller and buyer) to know their reductions easily anywhere at any time using their mobile phone and that will comfort them from going to supermarket or shopping which leads to save time and effort.

6.3 STUDY CONTRIBUTION

Using SMS mobile Application and WEB/WAP in marketing for the sellers and buyers helps from the peoples by gaining an easier way to make their Reductions view by providing them with the necessary information about products such as the price, offers, new products, big sales may be happen in this time and etc. one way as they want. The prototype was developed using PHP coding the SMS Mobile Promotion for the supermarket. The system completely developed using HTML language the study shows how the users can make their reductions enquire using the mobile device or the website, and the results show how the users were satisfied with this system. MySQL Database used to make the database that stores the necessary reduction information for the customers. The prototype has been evaluated and the objectives have been achieved.

6.4 PROBLEMS AND LIMITATIONS

Although this system provides the people with an easier manner for view the sales or reduction with all details, there are some significant disadvantages to the E-marketing by using mobile Application which includes the following points:

I.   The developing of WAP/Web and SMS, pages is more complex than developing pages for Standard web browser because of the limitation size of mobile screen space and internal memory in mobile devices. In development phase, developer need to concern about the size of the screen.

II.   Limited financial resources no actual web server can be utilized in testing, and need to buy credit (point package) from one of supply Service Company

6.5 FUTURE WORKS

The prototype will developed MMS to include image and demos to help all customers and sellers, the SMS Mobile promotion and WEB/WAP Application for the marketing is to enable the customer to watch the product information or big sale which happen always, and sending messages from the administrator to the customer about any celebrate for offers in marketing.

6.6 CONCLUSION

The objectives of this study are to develop SMS Mobile technology for supermarket promotion and do usability testing. In order to make requirements more understandable the requirements have been modeled by using some of UML diagrams such as use case diagram ,use case specification and sequence diagram to design the system requirement in order to illustrate the research objectives. the other features has been added to provide those users with the appropriate promotion by using WEB/WAP and SMS mobile.

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APPENDIX

QUESTIONNAIRE

ENGLISH QUESTIONNAIRE

University Utara Malaysia

College of Art and Science

QUESTIONNAIRE FOR THE EFFECTIVENESS OF USING E-MARKETING TO PROMOTE PRODUCT ON SALE FOR SUPERMARKET

SECTION A: **Demographic Background:** Please kindly tick (√) your answers to the given statements.

GENDER :   Male.   Female.

AGE :   18-25 Years old.   26-34 Years old.

              35-44 Years old.   44-54 Years old.

                        ✔ Above 55 Years old.

MARITAL STATUS :   Married.   Single.

SECTION B: Visual aspects of the Application tracking system pages:

Please check the appropriate column. The numbers 1 to 5 represent the following:

1= Strongly Agree.   2=Agree   3= Not Sure.
4= Disagree.   5= Strongly Disagree.

	Question	1	2	3	4	5
1	Is it easy to understand the informations provided espeacially the advertizing-related ones?					
2	is there any current system in your area that helps you to know the Daily reductions and promotions in the supermarket which is near to you through your mobile phone?					
3	If this system is developed do you think that it will facilitates the promotion process?					
4	Is it now easy for you to have acces to informations with regards to this domain?					
5	Are you interested to recieve messages about the daily reductions through your mobile phone ?					
6	Do you exect that we won't reach our goal through our system ?					
7	Is this a useful system for the seller and the buyer?					
8	Do you think that the field of marketing will benefit from the development of the short message service (SMS)?					
9	Is the design and the content of the message (sms) you recieved is sufficient for you?					
10	Does the coordination of the the text is appropriate?					

SECTION C: Benefits and User Satisfaction:

Based on the use of mobile goods and to promote the new system cuts as an alternative to traditional methods Please indicate your choice for both Yes.

1-   Do you think that the use of the mobile phone in promoting can include all Kinds of products?

   Yes.   No.

2-   Do you think that this system is an effective way to provide you with all the reductions while you are drinking coffee at home in front of TV?

   Yes.   No.

3- Do you feel satisfied with the service provided by the seller?

   Yes.   No.

4-   Do you think that the use of this system save your time and effort?

   Yes.   No.

5-   Are you satisfied with the traditional methods that are currently in use such as the disribution of publications and so on ?

   Yes.   No.

This is the end of questionnaire.

Thank you very much for spending your time to complete this questionnaire.

In case you need to contact me with regards to this survey, please contact with me by

E-mail me to:

Fadiiins24@hotmail.com Or Fadiiins24@yahoo.com Or Fadiiins24@Gmail.com

MALAY QUESTIONNAIRE:

Universiti Utara Malaysia

Kolej Sastera dan Sains

Soalan-soalan tentang kesan yang efektif berkaitan penggunaan E-pemasaran dalam mempromosikan barangan di pusat membeli belah

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BAHAGIAN A: Latar Belakang Demografi

Sila tandakan (√) untuk jawapan bagi soalan berikut.

JANTINA :   Lelaki   ⌐ Perempuan

UMUR :

⌐ 18-25 tahun   ⌐ 26-34 tahun

⌐ 35-44 tahun   44-54 tahun

✔ 55 tahun & ke atas

STATUS KEHIDUPAN :

                        ✔ Berkahwin   Bujang

BAHAGIAN B: Aspek visualisasi bagi menjejaki muka surat aplikasi sistem :

Sila tandakan (√) pada ruangan yang disediakan. Nombor 1-5 adalah seperti berikut :

1= Sangat bersetuju   2= Setuju   3= Tidak pasti

4= Tidak bersetuju   5= Sangat tidak bersetuju

	Soalan	1	2	3	4	5
1	Adakah maklumat yang diberikan mudah difahami terutamanya berkaitan dengan pengiklanan ?					
2	Adakah wujud sebarang sistem yang terbaru di lokasi anda yang membantu anda mengetahui pengurangan dan promosi harian di pusat membeli-belah yang terdekat melalui telefon bimbit anda ?					
3	Jika sistem ini dimajukan adakah ia akan memberikan kemudahan pada proses promosi ?					
4	Adakah sekarang mudah bagi anda mendapatkan maklumat berkaitan domain?					
5	Adakah anda berminat mengurangkan penerimaan pesanan harian melalui telefon bimbit anda?					
6	Adakah anda menyangka bahawa kita tidak akan mencapai objective melalui sistem kita ?					
7	Adakah sistem ini berfaedah kepada pembeli and penjual ?					
8	Adakan anda memikirkan bahawa bahagian pemasaran akan mendapat faedah daripada kemajuan perkhidmatan pesanan ringkas ?					
9	Adakah model dan daya muatan pesanan ringkas yang di terima mencukupi bagi anda ?					
10	Adakah kordinasi pada teks bersesuaian ?					

BAHAGIAN C: Manfaat & Kepuasan Pengguna

Nyatakan maklum balas anda terhadap aplikasi berita melalui telefon mudah alih untuk kawasan luar bandar sebagai satu aplikasi alternatif terhadap sistem yang sedia ada, sila nyatakan jawapan anda Sama ada ya atau Tidak.

1-   Adakah anda memikirkan bahawa penggunaan telefon bimbit secara promosi berpotensi dalam semua perkara ?

   Ya   Tidak

2-   Adakah anda menggangap bahawa sistem ini adalah cara yang berkesan dalam menyediakan maklumat sementara anda minum kopi di depan kaca tv ?

   Ya   Tidak

3-   Adakah anda merasa berpuas hati dengan perkhidmatan yang disediakan oleh penjual ?

   Ya   Tidak

4-   Adakah anda memikirkan bahawa penggunaan sistem ini menjimatkan masa dan usaha anda ?

   Ya   Tidak

5-   Adakah anda berpuas hati dengan cara lama yang pada masa ini digunakan seperti menyumbangkan risalah untuk orang ramai dan sebagainya ?

   Ya   Tidak

Soalan Tamat.

Terima kasih di atas kesudian anda untuk melapangkan sedikit masa untuk menjawab soal selidik ini.

Sekiranya anda mempunyai sebarang pertanyaan berkaitan dengan soal selidik ini,

sila hubungi saya melalui email saya iaitu:

Fadiiins24@yahoo.com or Fadiiins24@hotmail.com or Fadiiins24@Gmail.com

Q1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	9	18.0	18.0	18.0
	agree	20	40.0	40.0	58.0
	not sure	9	18.0	18.0	76.0
	disagree	12	24.0	24.0	100.0
	Total	50	100.0	100.0	

Q1

Mean = 2.48
Std. Dev. = 1.05444
N = 50
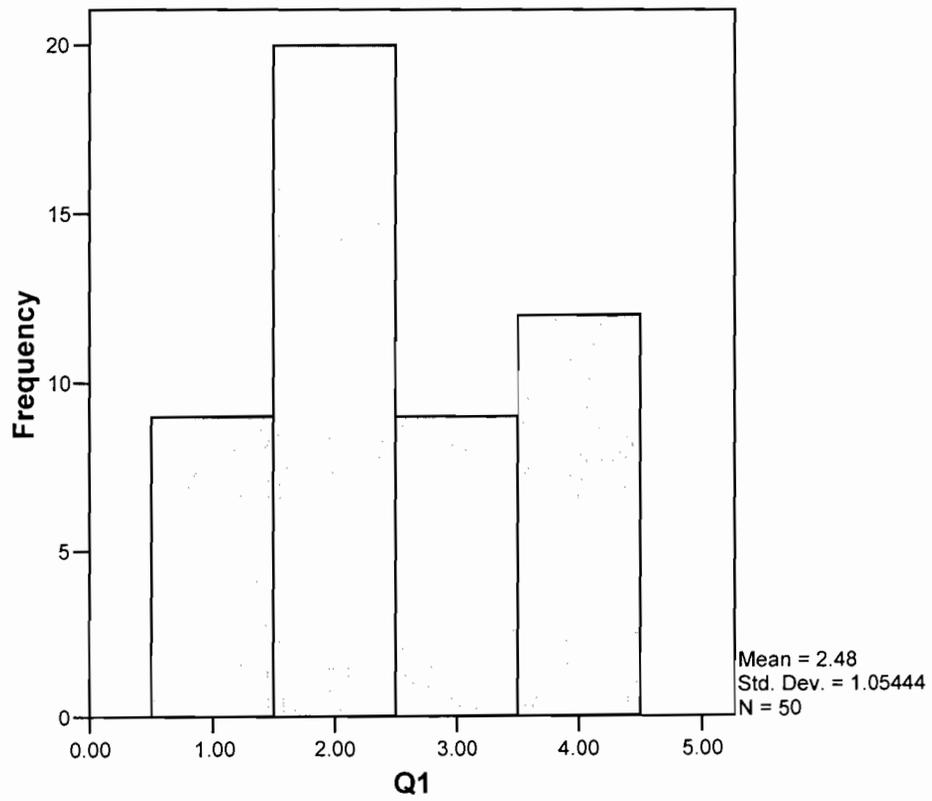
Q2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	16	32.0	32.0	32.0
	agree	15	30.0	30.0	62.0
	not sure	13	26.0	26.0	88.0
	disagree	5	10.0	10.0	98.0
	strongly disagree	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

Q2

Mean = 2.20
Std. Dev. = 1.06904
N = 50
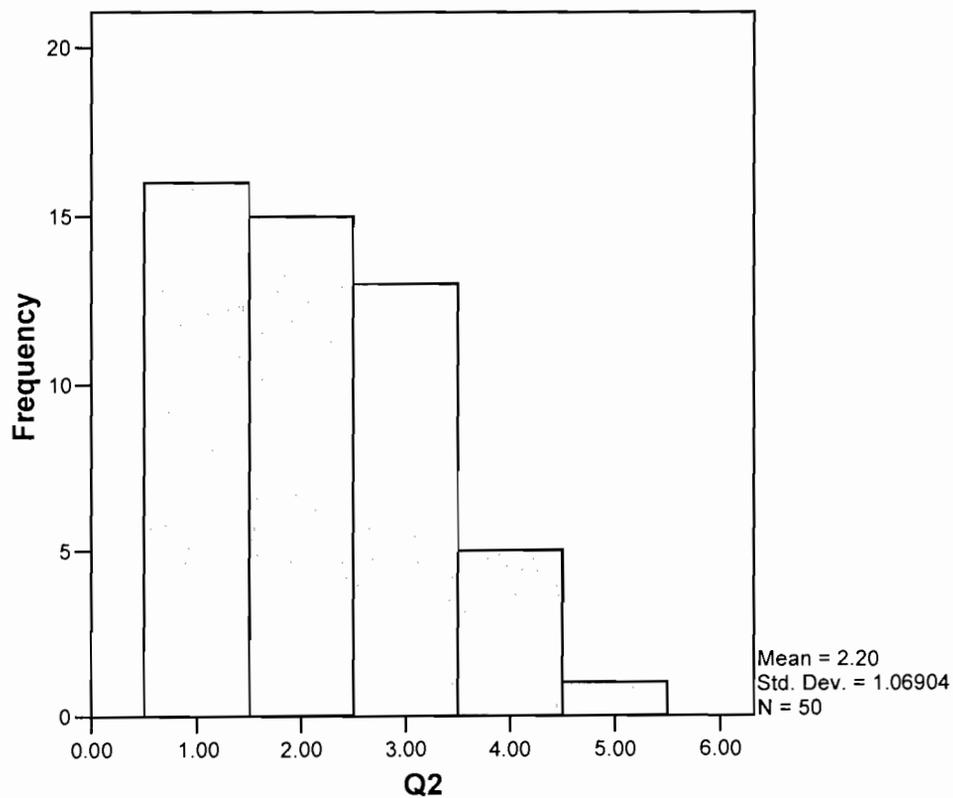
Q3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	16	32.0	32.0	32.0
	Agree	19	38.0	38.0	70.0
	not sure	7	14.0	14.0	84.0
	disagree	8	16.0	16.0	100.0
	Total	50	100.0	100.0	

Q3

Mean = 2.14
Std. Dev. = 1.04998
N = 50
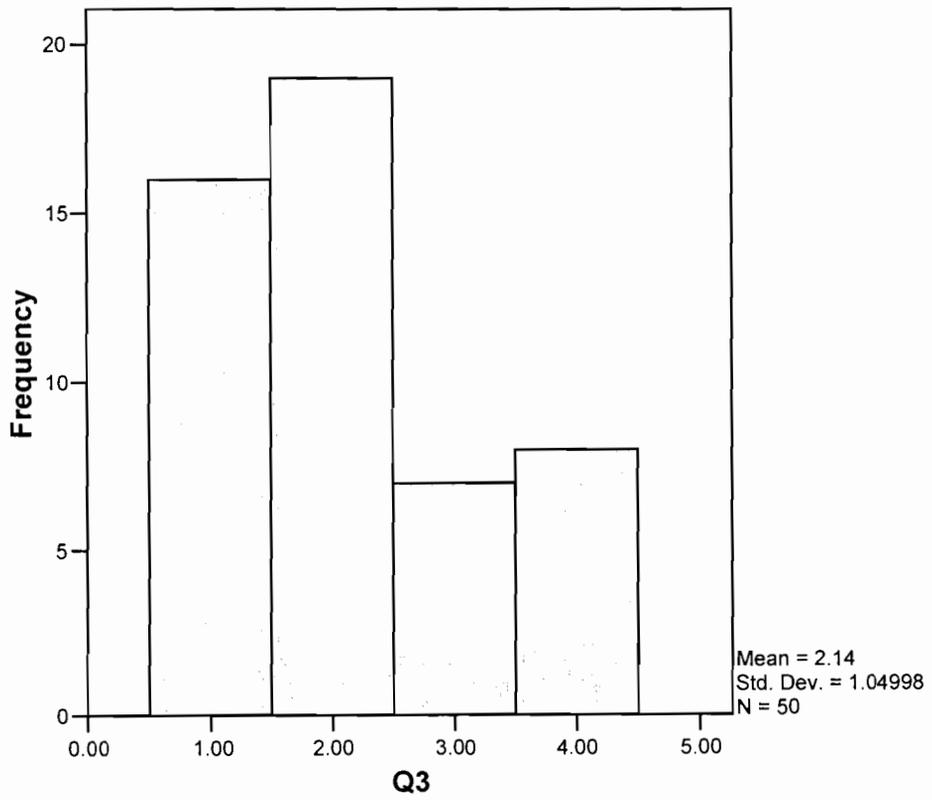
Q4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	17	34.0	34.0	34.0
	agree	27	54.0	54.0	88.0
	not sure	2	4.0	4.0	92.0
	disagree	3	6.0	6.0	98.0
	strongly disagree	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

Q4

Mean = 1.88
Std. Dev. = 0.89534
N = 50
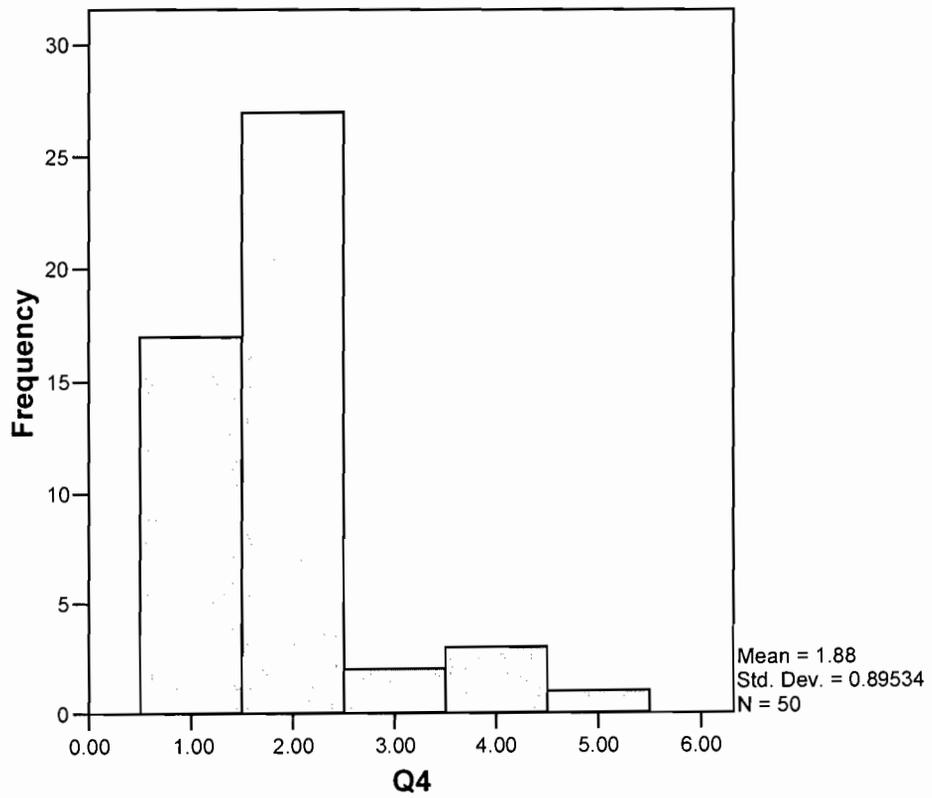
Q5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	17	34.0	34.0	34.0
	agree	22	44.0	44.0	78.0
	not sure	5	10.0	10.0	88.0
	disagree	5	10.0	10.0	98.0
	strongly disagree	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

Q5

Mean = 2.02
Std. Dev. = 1.02
N = 50
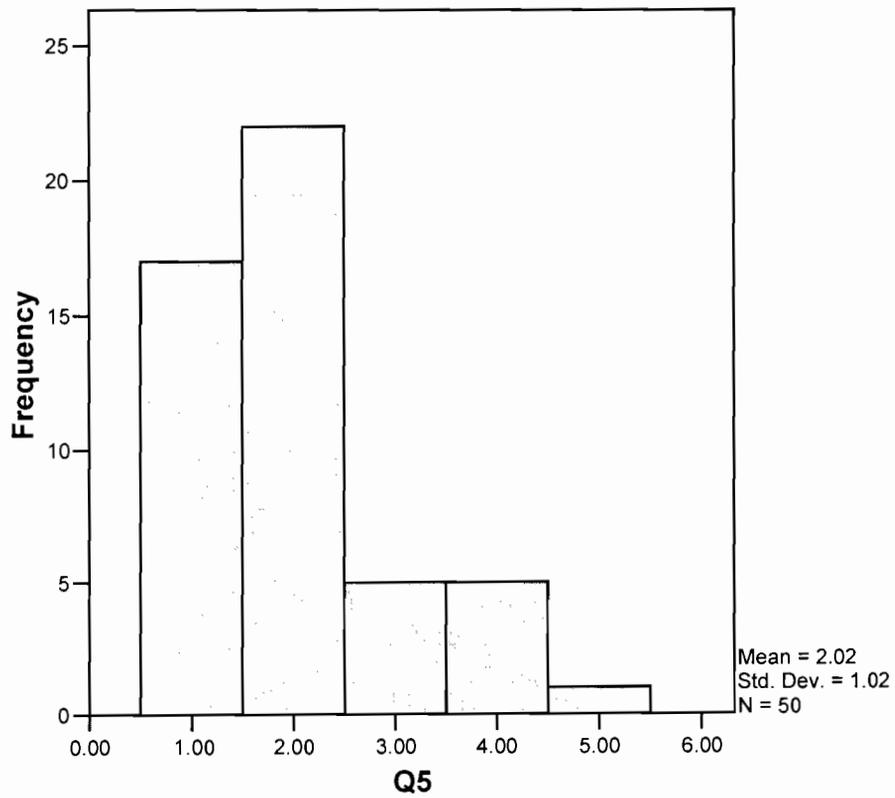
Q6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	12	24.0	24.0	24.0
	Agree	25	50.0	50.0	74.0
	not sure	9	18.0	18.0	92.0
	disagree	4	8.0	8.0	100.0
	Total	50	100.0	100.0	

Q6

Mean = 2.10
Std. Dev. = 0.86307
N = 50
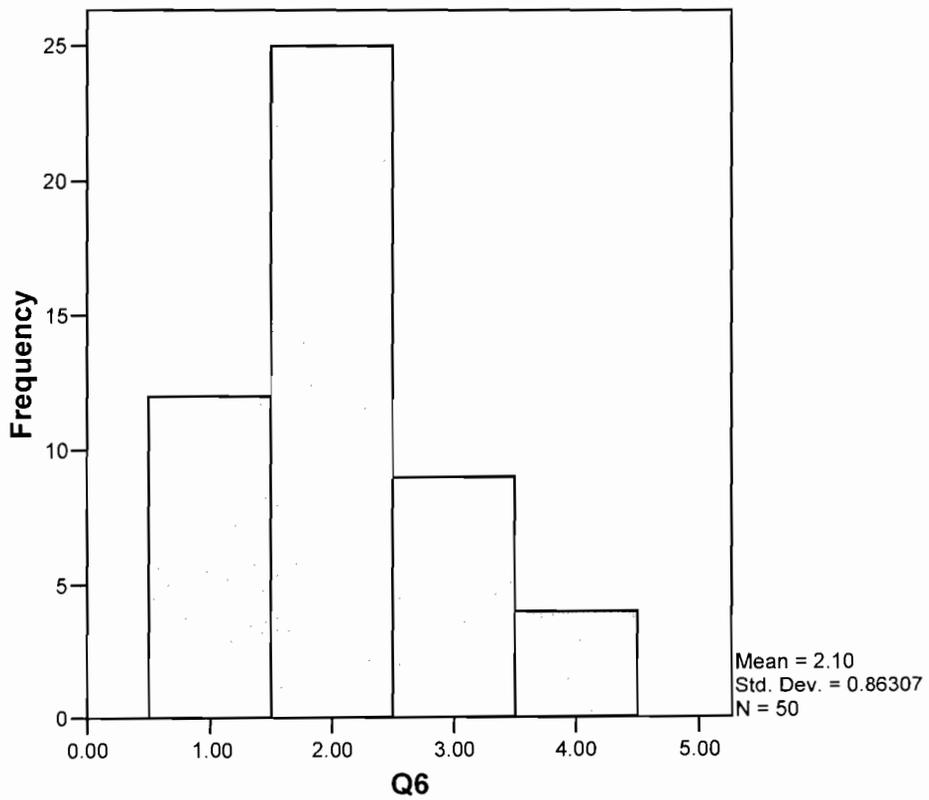
Q7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	19	38.0	38.0	38.0
	agree	21	42.0	42.0	80.0
	not sure	4	8.0	8.0	88.0
	disagree	6	12.0	12.0	100.0
	Total	50	100.0	100.0	

Q7

Mean = 1.94
Std. Dev. = 0.9775
N = 50
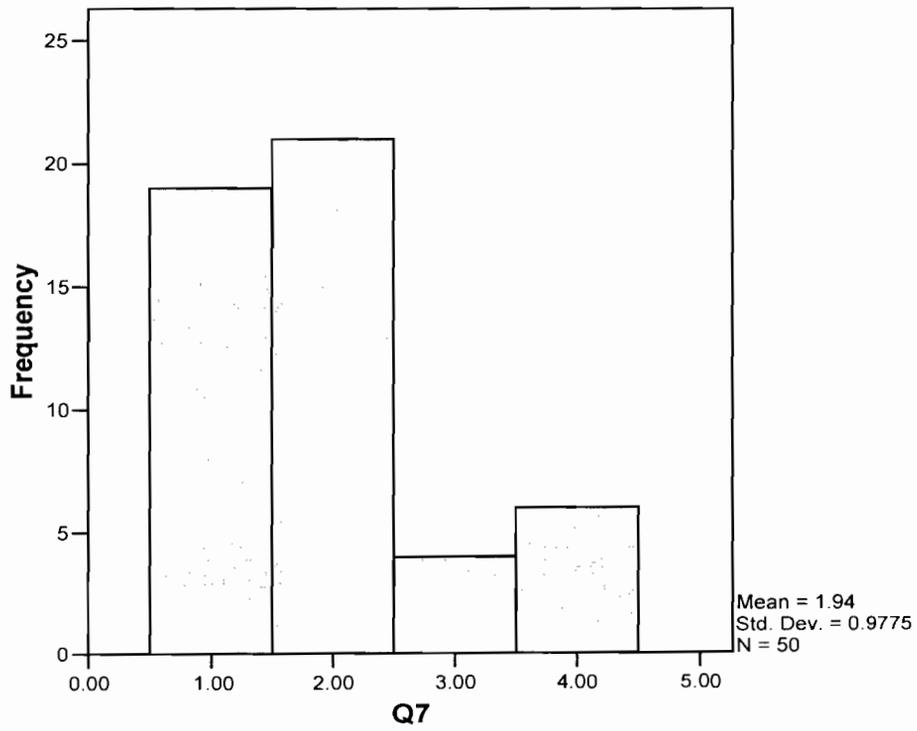
Q8

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	4	8.0	8.0	8.0
	agree	20	40.0	40.0	48.0
	not sure	10	20.0	20.0	68.0
	disagree	11	22.0	22.0	90.0
	strongly disagree	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

Q8

Mean = 2.86
Std. Dev. = 1.16075
N = 50

82
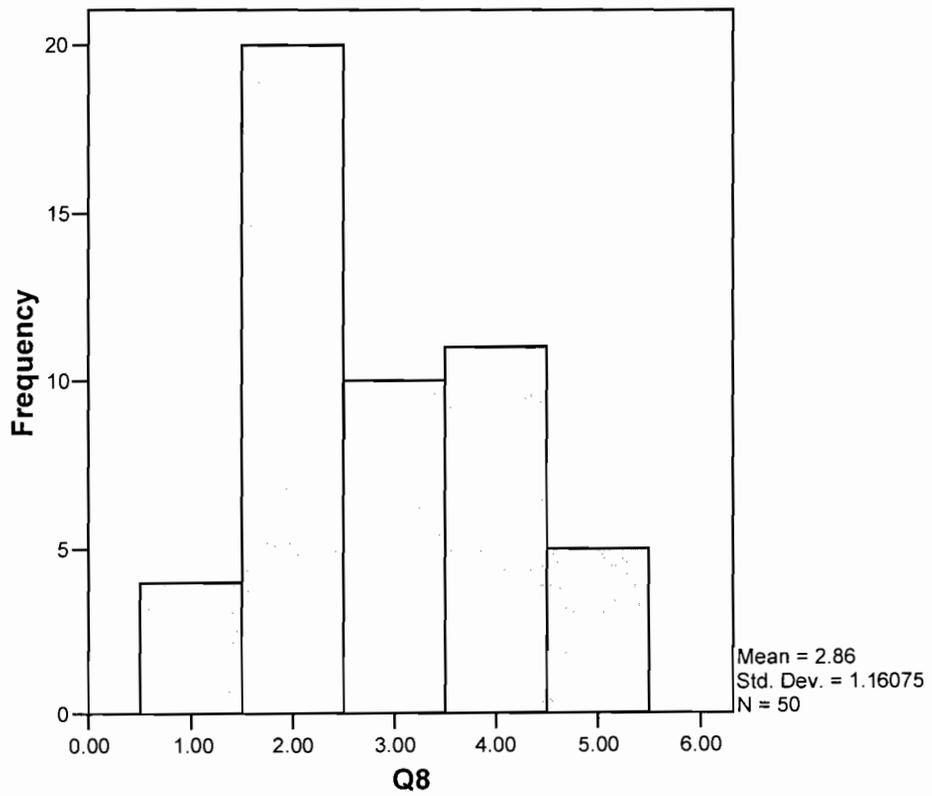
Q9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	12	24.0	24.0	24.0
	agree	21	42.0	42.0	66.0
	not sure	8	16.0	16.0	82.0
	disagree	6	12.0	12.0	94.0
	strongly disagree	3	6.0	6.0	100.0
	Total	50	100.0	100.0	

Q9

Mean = 2.34
Std. Dev. = 1.1537
N = 50
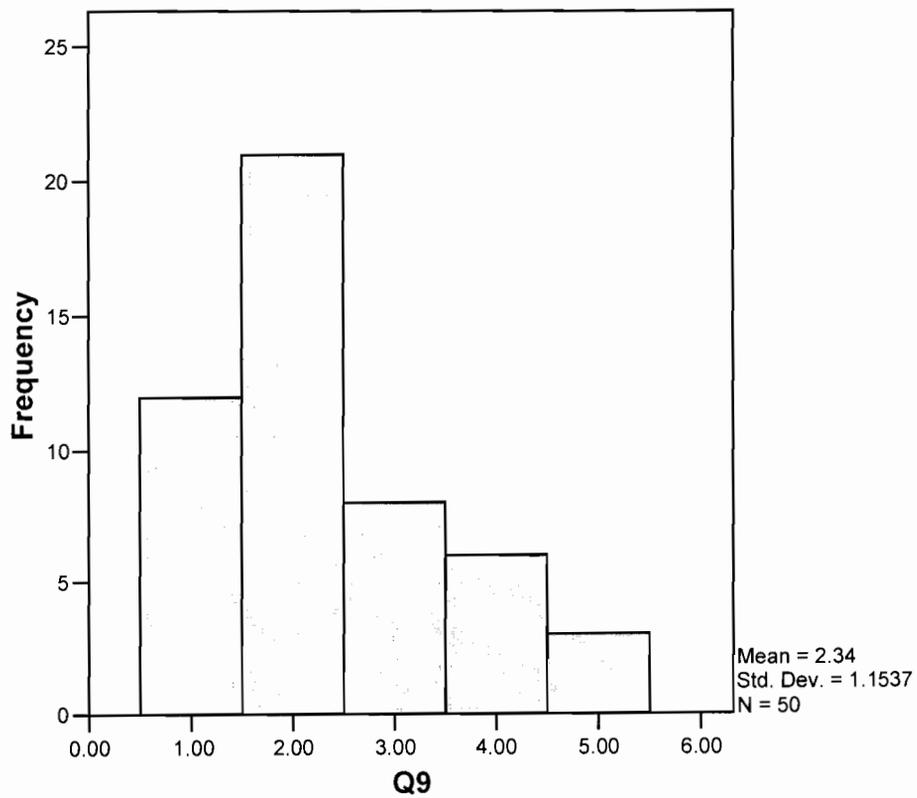
Q10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	20	40.0	40.0	40.0
	agree	6	12.0	12.0	52.0
	not sure	10	20.0	20.0	72.0
	disagree	10	20.0	20.0	92.0
	strongly disagree	4	8.0	8.0	100.0
	Total	50	100.0	100.0	

Q10

Mean = 2.44
Std. Dev. = 1.40204
N = 50