Introduction

1.1 Review of the present system

Personal computer, laptop, notebook, PDA ..., information technology is in a rapid development. Processing power of computers increases whereas the size reduces. Most people prefer tiny devices. World is being changed to hand held devices because of its easy usage. There by in the present era of mobile technology hand held devices play major roles to ease human activities. At present it is hard to think of a person without a mobile phone. Younger to adult, adult to elder all are 'mobiholics'. As the future demands on mobile devices and its applications, researchers, scientists and developers make their immense effort on the development of mobile technology.

Most business enterprises seek methods to offer their services, through mobile phones. It has become a style and people prefer its portability, accessibility, light weight and ease of use etc. Unlike computers, mobile operators do not need a sound knowledge on usage. Nowadays major marketing strategies are aimed through internet. Each and every business organization focuses their market towards e-marketing. Developers work on e-marketing solutions.

1.2 Growth of mobile web

"The U.S. mobile Web will reach nearly 100 million unique users per month in 2010, according to Millennial Media. In 2009, the U.S. mobile Web grew at an average rate of 2 percent month over month, according to Nielsen. At this rate, combined with the accelerated adoption of smart phones and mobile-specific sites, the mobile Web will reach more than one-half of the consumers on the wired Web." [1]

Nowadays the internet is available everywhere. When considering the devices which can be used to connect to the internet, it seems the PCs and laptop computers make the user uneasy when travelling. Unlike those equipments, the mobile phone had become a major

electronic device and had won the modern human desires. Nevertheless it is difficult to think of a life without a mobile phone.

Mobile phone industry and the mobile technology show vast development. Manufactures are willing to embed more facilities on the devices [1]. Truly it is no more a mobile Phone. It encapsulates all features of a computer, specially, the support for internet connectivity. All modern mobile phones have GPRS and WAP facilities.

1.3 Major issues of the current system

In an ordinary restaurant there are no well maintained communication systems from business to customer and the customer to business. Customers are willing to go to their favorite restaurant for their needs of food. They like to seek the menu and price of each food, special food items for a change. They reserve tables, meet their friend, chat with them while having favorite menu. Present restaurant system allows on things mentioned above. It is worth to discuss some issues on the present restaurant system. Suppose a customer need a specific food item, First he should go to the restaurant where it located. Then he has to wait for his turn. Make an inquiry. If food item is available he can order. If not, he would have to move to the next known restaurant. This process is a tedious task. Imagine you visit a restaurant with one of your friend for a dinner, when there is no room (tables) available; you have to run to the next. There is no system to get the price list of each food item or menu. Customer should physically come to the restaurant and check on the paper based menu for the prices or over the phone. It makes customer hesitation.

"Highlights a number of recent studies that all seem to support the same observation — people are increasingly using their mobile phones to shop for items they may be interested in purchasing. One study, by PriceGrabber.com completed in April of this year(2010), showed a doubling of interest in shopping behavior on the mobile platform over the past year" [2].

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1.4 Aim & objectives

The primary aim of the mobile based customer care service is for reservation, table management and customer management software for restaurants though web.

For customers and administrative staff, this website provides facilities to select a desired restaurant location among the available restaurants, efficient way to find available tables that meet desired criteria of customer, price and location at a specified time. Search results reflect actual, "real-time" availability and reservations are immediately recorded.

- Study the problem domain thoroughly. Study of existing system concentrating on problems and major issues of it and aims/objectives of the project are considered to make a clear, concise and informative solution to the problem.

- Study the suitable technology and find ways how this technology is used to solve the problem.

- Design & develop WAP enable web site to cater for customer requirements such as to view menu, order meal, table reservations, request new registration and to make bill payments through credit card.

- Design & develop web application to cater for restaurant management requirements such as to customer registration, set order state and update menus.

- Preparation of the final dissertation, including chapters such as introduction and background, review of other approaches to the similar application, Technology adapted, Solution to the problem, analysis and design part, implementation of the solution, evaluation, conclusion and further work.

1.5 Proposed solution

WAP enabled web based technology is used to provide facilities to both customer and restaurant management to fulfill their needs. This system provides facilities direct customers to collect their orders or having their meal at selected location where the branches exists.

Mobile and web based technology is suggested to overcome those issues. Both the customer and the business get benefits. The customers use the hand held devices while the business facilitate the technology by maintaining web based servers and supporting software and hardware solutions to get benefits on the reverse.

The following functionalities can be done through the hand held device and web based technology in customer services.

- Ability to select location of the restaurant.

- Ability to request new registration for guest.

- Ability to select desired fix set menu and reserve table.

- Ability to give a priority to registered customer.

- Customer can view and reserve availability tables.

- Ability to indicate availability of selected items use and total cost for the order.

- Ability to view order state.

- Ability to make the payment through credit card.

- Ability to inform customer satisfaction level.

- Ability to reduce the cost to maintain the call centre and the call center personal and reduce the telecommunication cost

- Transactions will be made 24 hours and 7 days from any location.

- Enhance the decision making of management staff, enhance the supply chain management system and stock maintaining. Order processing could be done in Just in time process.

- Facilitate the two way communication customer to business and the business to customer.

Both customer and restaurant management can get the benefit out of this system.

Time saving: - Customers need not to visit the place where he purchase or have meals and do not need to consider the availability of item. There is no shopping in search of specific item shop to shop. Everything could be done in one location. Benefit goes to customer reducing the travelling time.

Cost effective: - Reduce the cost of maintaining the call centre and call centre staff. Also decrease the cost of creating, storing, updating the paper based information. On the other hand customers reduce their travelling cost and their valuable time.

Increase customer satisfaction: - Customer satisfaction level could be maintained at high level due to ease of ordering and reservation of tables as well as they get benefit reducing their transportation charges and the guarantee of availability.

Enhance the business process:-Enhance the management staff decision making, ordering process and stock management as well as management can judge and predict the business situation using collected information. Improve plan the future of the business.

1.6 System requirements
- Apache – Web server
- MYSQL – DBMS
- WML/ HTML – Web pages

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- WML Script, Java Script – Form validation
- PHP – Web programming
- GPRS activated and WAP enabled suitable mobile phone
- Server computer – Web hosting
- PC with at 1 GHz 32-bit or 64-bit processor with internet connection

1.7   Structure of the report

Chapter 1 – Gives brief introduction about background & motivation of the propose system. Even it described the aim & objectives of the project.

Chapter 2 – This chapter will discuss the brief description is included about traditional methods and different between traditional methods and propose system. Further it was discussed about the similar projects which are currently available.

Chapter 3 – This chapter will discuss the background study for the project and will describe the research done on Wireless Application Protocol (WAP) and Multitier Architecture and advantages of WAP.

Chapter 4 – Requirement analysis and system design for the project are detailed in chapter 4. Technical analysis such as Unified Modeling Language (UML) diagrams, class diagram and Database table structure are (Entity Relationship diagrams) included in this chapter.

Chapter 5 – This chapter will discuss the implementation of the system and it describes used software and hardware, database implementation and coding modules.

Chapter 6 – Evaluation of the system as well as the prototype is discussed in this chapter.

Chapter 7 – This chapter contains the limitations of the project, achievements, difficulties encountered by the author in carrying out the project, solutions to identified problems and author's comments on the project.

1.8   Summary

This chapter described background & motivation of the project. It was stated aims and objectives of the current project. On the next chapter, it will discuss about the traditional methods, difference between the propose project and traditional methods and also about the existing similar systems under the heading of "Related Work".

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