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Restaurant Booking Website

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Abstract: *The system is implemented to reduce the manual work and enhances the accuracy of work in a restaurant. This system manages and maintains the record of customers and their order online. This Website has been made in a user-friendly interface. So that Customer can add and delete the food items easily. The menu card of different restaurant consists of various food varieties available in the restaurant. Through the place ordering menu, the customer can simply click and order the food. The messaging module tells the supplier to supply the particular food. Also tracking module track the order. The billing system prepares the bill according to the delivered food. This system entirely reduces the unnecessarytime. Every order is associated with an individual seat at the table, and orders are built one customer at a time, just like on paper, but with greater accuracy. Items can also easily be shared by the whole table, moved or modified, and noted and the cost can be calculated in real time*

Keywords: Restaurant Booking

I. INTRODUCTION

Over the years, technology has tremendously revolutionized the restaurant industry. Much of the innovation has been with point-of-sale (POS) operations. There is a famous saying that "People eat with their eyes". The e-Menu provides additional information about menu items and drinks than a traditional paper menu. The simplicity and ease of access of a menu are the main things that facilitate ordering food in a restaurant. The service goes quicker. Restaurants can build their e-reputation and customer community in live. The restaurant menu has evolved from its humble beginnings on carte chalkboards and imageless print to today's detailed, colorful displays. With the emergence of digital tablets and user-friendly touch screen technology menus can move to a whole new surface. With this electronic menu, orders can be taken correctly the first time. There is no need to run back and forth to a distant terminal, because the terminal is always with the server. Every order is associated with an individual seatat the table, and orders are built one customer at a time, just like on paper, but with greater accuracy. Items can also easily be shared by the whole table, moved or modified, and noted and the cost can be calculated in real time. The Recommendation algorithm suggests dishes to the patrons based on previous orders. It makes it easier for the customer to build his/her order and also view the most popular dishes. Moreover, various dimension filters can be used according to individual preferences eg. Price, taste, quantity,etc.

The project is developing because; many restaurants have a lot difficult to manage the business such as customer ordering and reservation table. If the customer book an order and later wants to cancel the order, he is permitted to do this only within a specific time period. By using manual customer ordering it is difficult for the waiter to keep the correct customer information and may lose the customer information. The customer is also given the facility to view the status of the order to determine if it is ready Restaurant Booking website is the system for manage the restaurant business. After successful login the customer can access the menu page with the items listed according to the desired time. The main point of developing this system is to help restaurant administrator manage the restaurant Website and help customer for online ordering and reserve table. In proposed system user can search for a menu according to hischoice i.e. according to price range and category of food andlater he can order a meal.

1.1 User Based Problem

Nowadays, many restaurants manage their business by manual especially take customer ordering. . In traditional booking system, a customer has to go to restaurant or makea phone call in order to get his meal reserved. Today,

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restaurant waiter takes the customer ordering by manual system with using paper. Customer does some formal conversation like hello, hi, etc. Than he demands for today's menu and do some discussion over menu items then he orders. It takes 5 to 10 minutes to book the order and waiter book the order on paper so there is probability of lost and duplication of customer information. Restaurant Booking Website puts the order in a queue with specific priority according to time and quantity, and then a cook is assigned for the specific order to complete Besides, the restaurant waiter information also by manual system kept use paper and this is difficult for restaurant administrator to find waiter information, probability missing the paper and difficult to arrange the schedule. Initial problem is that the customer has to get connected over the phone; it would be harder if the restaurant is very popular and busy. Sometimes, waiter information and customer information is important to restaurant administrator for reference in the future. The chances of committing mistakes at the restaurant side in providing a menu list fora specific time would be more.

II. REVIEW OF LITERATURE

The perspectives of organizational, marketing and strategic management theories provide a reliable theoretical groundwork to understand the important managerial aspects of menu. For instance, organization theory explicitly emphasizes the influence of external environment both on the decisions of firm managers and the survival of firms on the long run. More specifically, external environment is one of the central themes of organization theory and the relevantstudies (Duncan, 1972, Jurkovich, 1974, Dess and Beard, 1984, Ashill and Jobber, 1999) primarily propose that managers essentially consider the influential external factors that create uncertainty, diversity and volatility while makingtheir decisions. Planning and operating menus in a restaurant context involve considering external factors such as customers, rivals, and vendors that have a great potential in creating uncertainty, diversity and volatility in the restaurants' immediate business environment.Complementing this view, marketing theory recognizes the importance of identifying the needs and expectations of customers, and developing and improving products and service perfectly fit to those needs and expectations. Additionally, pricing, promoting and distributing the products and services should also be consistent with the customers' needs and expectations on the one hand, and with the firm's objectives on the other hand. Thus, in the it. restaurant context, it is imperative that menu as the food and beverage combinations offered by a restaurant reflects the expectations and needs of customers. Moreover, managing menus involves planning, pricing, designing, distributing and promotional decisions which are also the main issues of marketing. Strategic management is another promising theoretical perspective that helps us understand the importance of menu and its associated managerial activities with reference to competitiveness of restaurants. Indeed, creating and sustaining a competitive advantage is the main focus of strategic management discipline

More specifically, strategic management principally investigates the phenomenon of sustainable competitive advantage as a source of performance differences among business firms (Nerur et al., 2008). Following this argument, it is plausible to consider the role of menu in creating sustainable competitive advantage for restaurants. In particular, offering a unique meal experience and assuring customer satisfaction are the main sources of competitive advantage for a restaurant. As one of the important components of meal experience, menu deserves a special attention to understand how a restaurant firm can achieve its strategic goals, can create a sustainable competitive advantage, can satisfy its customers and canoutperform the rivals. Strategic management literaturecurrently encompasses a wide range of strategic management schools posing different strategy definitionsand processes (Sarvan et al., 2003). As a result, there are various understandings of the meaning of strategy

For example, if the strategy is low cost leadership, thendecisions on planning, pricing and designing menu reflect the strategy through selecting low cost menu items, pricing menu items at a lower price than rivals, and attractively presenting menu items with low prices on menu card, whichprobably result in customers' perceptions of a satisfactory meal experience with a reasonable quality. Conversely, when a differentiation strategy is chosen, a restaurant manager is expected to be attentive to (i) selecting or innovating unique menu items, (ii) setting higher prices withan expectation that customers are willing to pay premiumfor a differentiated product, and (iii) heavily concentrating on attractively presenting unique items on menu card to create a positive image of a unique meal experience. Thus, all managerial decisions with reference to planning, pricing and designing menus are the reflections of the chosen strategy such as low cost leadership or differentiation.

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III. METHODOLOGY

A method of managing a restaurant with a computerized system for restaurant booking website, the computerized system for restaurant booking website comprising: an order input interface for obtaining food order data; a service input interface for obtaining point-of-sale service data; a task completion input device, the task completion input device having a human readable display and an input interface capable of receiving an input from a human indicating completion of restaurant tasks, the input device having program code capable of indicating a task to be completed on the human readable display and program code for generating restaurant task completion data; a computer system connected to the order input interface and the service input interface, the computer system capable of receiving food order data from the order input interface, point-of-sale service data from the service input interface and restaurant task completion data from the task completion input device, the computer system having computer program code capable of generating restaurant performance data based on data selected from the food order data, point-of-sale service data, and restaurant task completion data; a first computer program code operable by the computer system and capable of transforming the restaurant performance data, task completion data and past restaurant staffing data into metrics; a second computer program code operable by the computer system and capable of providing a report summarizing restaurant staffing, metrics and targets for metrics, the metrics including service times, and equipment maintenance or food safety metrics, the method comprising: obtaining:

- food order data from the order input interface;
- point-of-sale service data from the service inputinterface;
- restaurant staffing data; and optionally
- the task completion data from the task completion inputdevice

the computer system receiving data composed of the food order data, the point-of-sale service data and the optional task completion data; transforming the food order data, the point-of-sale service data and the optional task completion data into metrics with the first computerprogram code; producing a report by the first computer or another computer, the report summarizing past restaurant staffing data, metrics and targets for metrics, the metrics including service times, and equipment maintenance or foodsafety metrics, the service time metric based on the time from a customer placing a food order to presentment of the food order to the customer or from a customer payment to presentment of the food order to the customer during the past in-restaurant staffing data;

IV. DESIGN

This chapter aim to present my design of the Restaurant Booking Website .Each design decision will be presented and rationalized ,and enough detail will be given to allow the reader to examine each element in its entirety Proposed System

V. EXISTING SYSTEM

The current system is paper based. Papers are used in restaurants for displaying the traditional menu cards, writing down the orders of customers, storing the records of customers. The disadvantages of paper-based system are that papers can get easily damaged by stain marks; they can be lost due to fire or accidents or can get lost in general. Hence, time and money is wasted. As traditional menu cards are paper based, any changes that need to be made in the menu will require reprinting of theentire menu card, leading to wastage. For small changes, reprinting the entire menu card is impossible. Changes in the menu card cannot be made dynamically. It is inefficient to access a particular record from the stack of papers. This system is time consuming. One has to call a waiter number of times till he notices it, and wait for him to arrive at their table to take their order.

Also the waiter can misinterpret the customer's order since he is writing the order on paper, and the case of serving a wrong dish is possible.

VI. PROPOSED SYSTEM

A tablet menu significantly transforms the eating experience for the customer. There are now system that allow restaurant tofeed their menus into iOS and website to making it simpler forcustomer to flip, swipe, and tap through the menu. Our goal is to provide restaurants with tablet menus with enhanced menu displays using Android phones that

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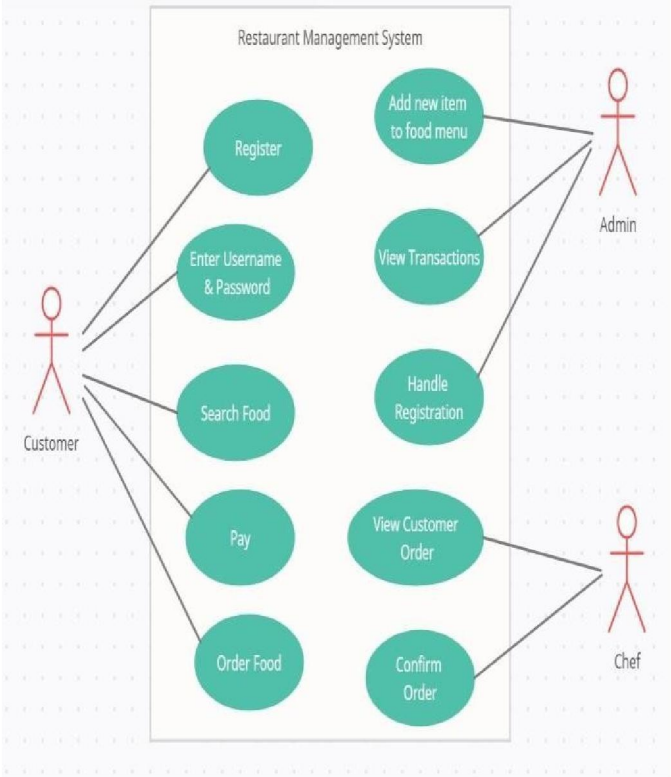
suggest dishes based on an algorithm. In addition, we use an Android tablet rather than an iOS tablet, which is a more expensive option, to run the software. The database is cheap and secure to store because we use a cloud-based server. Customers who sit at tables equipped with tablets, according to developers of related applications, spend 10% more than those at other tables ("people buy more when they can do so instantly, without waiting for service"). The following modules make up the proposed system.

- Module 1: Login Module In login module the customerand restaurants login will be taken while they already registered on the application. Every manager/user will have login id and password to login to the application.
- Module 2: Registration Module This module is displayed to the visitors if they need to perform some order placements, and new registration for restaurantswho wants to do business with us on our online restaurant booking website.
- Module 3:Add/Update/remove Menu This module is Admin have rights to insert, update (modify) and delete the data in database as per his/her necessaryrequirements.
- Module 4:Account Management Module There will be an account manager who will manage all the online order transaction and he/she will be responsible for issuing printed copy of customers payment receipts
- Module 5: Station Tracking Module This module describes the current location of any particular area over the usage of internet connectivity and GPS. This module is useful to find the location of order placed and for estimated time delivery.
- Module 6: Place Order Module The activity is performed by customer itself whose registration is already done. Once the verification is done by application, the order gets confirmed and delivery will be given to the dedicated customers address.
- Module 7: Carting Module This is additional feature given to add the food items in customer's virtual basket just like pending orders or the orders which customer wants to do later. But, if the customer is first time visiting then he/she will unable to place order until he/she do registration to our application.

Use case diagram of Restaurant Booking Website:



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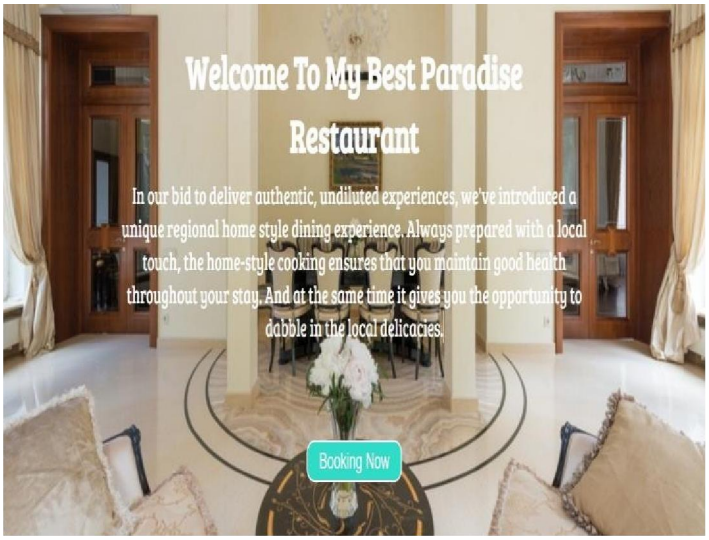
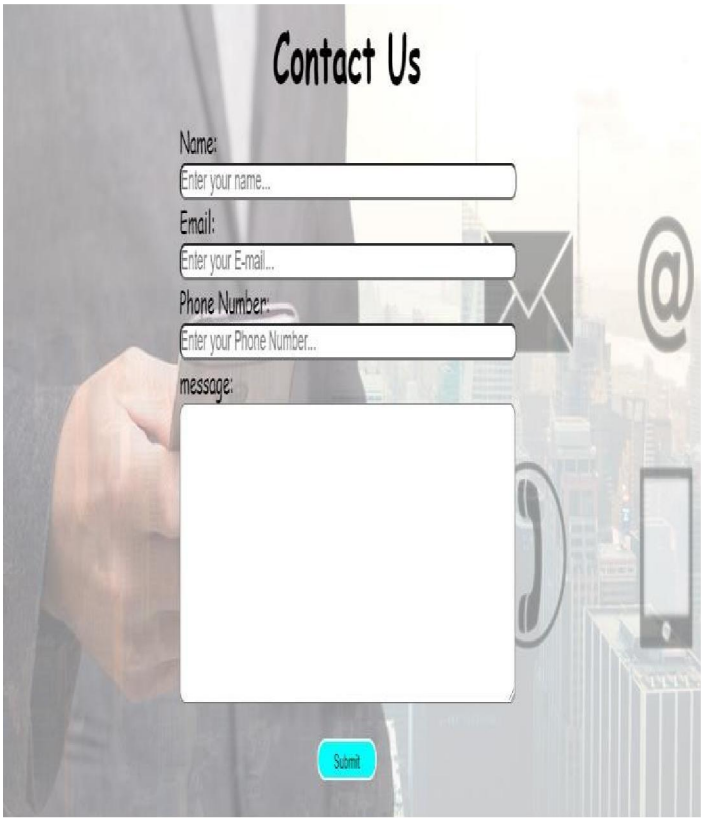
VII. RESULT



User panel:



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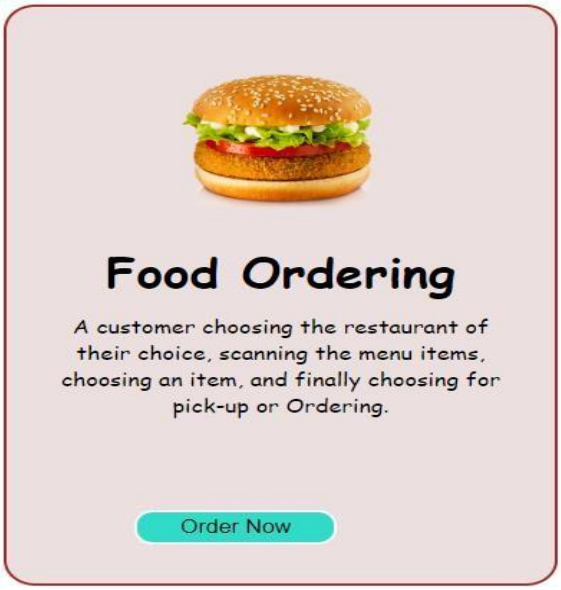

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Admin Module

ADVANTAGES:

- Improve website design and navigation based on user behavior analysis
- Identify effective revenue strategies for sustained profitability
- Use positive research outcomes for marketing and building customer trust
- Stay updated with market trends for maintaining competitiveness
- Guide strategic decisions based on data-driven insights from research

DISADVANTAGES:

- Rapid technological advancements make research quickly outdated.
- Ethical concerns about user data privacy and consent for research purposes.
- Restaurant industry fluctuations make long-term predictions challenging.
- Research demands significant time, effort, and resources for comprehensive analysis
- Legal and regulatory constraints related to data usage and analysis

VIII. CONCLUSION

Here the need for tablet food ordering is analyzed and its advantages over the traditional food ordering system in restaurants are studied. The proposed online restaurant booking website is time saving and error free as compared to the traditional system. This system attracts customers and also adds the efficiency of maintaining the restaurant's ordering and billing. Hence it is the modern way to grow up the business using E-commerce. Here implementation of an advanced e-restaurant menu ordering system using website. This system entirely reduces the unnecessary time. Every order is associated with an individual seat at the table, and orders are built one customer at a time, just like on paper, but with greater accuracy. Items can also easily be shared by the whole table, moved or modified, and noted and the cost can be calculated in real time. The idea of the advanced e-restaurant can also be extended for future using GPRS module. GPRS module can be used to monitor and request of the menu order from table will be directly sent to the predefined web link for process of even billing the items purchased.

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