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Online meal system using web portal (E-meal)

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Abstract - *On-line shopping is a recent phenomenon in the field of E-Business and is definitely going to be the future of shopping in the world. Most of the companies are running their on-line portals to sell their products/services on-line. Using approach on daily purpose like on meal ordering we can improve the quality of services and more facilities and flexibility to the customers. As website and mobile application is the best platform to easy and fast interaction with lots of people in less time and less resources it can be use to implement the service like online meal system (e-meal). We are using end to end service using website as a getaway like any meal suppliers or housewife those who can provide meal they can register on website and also the customer who want meal he/she can register and order meal. At the time of registration customer can enter choices like price ,quality, quantity he/she can get required meal as per customers likes and also using the online portal or offline support (telephone)customer can cancel his/her order . Thus we are using end to end service the things like brokerage is reduce hence customer will get meal in cheap price as compare to other food ordering portal .*

Key Words: *E-meal, E-business, Dynamic website, COD (cash on delivery).*

1. INRODUCTION

With the online food ordering method, food is ordered online and delivered to the customer. This is made possible through the use of electronic payment system .The payment can be done through the customer's credit card, debit card. So, in this project we design a system which will allow customers to go online and place order for their food. Due to the rapid growth in the use of internet and the technologies associated with it, the several opportunities are coming up on the web. So many businesses and companies are now undertaking into their business with comfort because of the internet. One of the businesses that the internet introduced is an online food ordering (meal) system.

The earlier meal ordering system was entirely a manual process which involved pen and paper. The meal provider had to note down orders from customers, take these orders to kitchen, update them in records and again make bill. Even though this system is simple it may involve human errors in noting down the orders. To overcome these limitations in manual system we can use web technology to solve this problem along with it can provide more facilities and services to customers and also it is flexible for meal provider to update records, generate online bill and also customer can pay online using online payment getaway.

Due to this system many food provider is connected and those are providing variety in food many options are available for customers on single place just by login on website.

For any customer who is facing first problem is searching good quality meal services in his/her area even if he/she got meal provider in maximum cases customer is not satisfied with those services due to common issue like food quality and price but if customers uses web portal then this task is easy for them and also it can save lots of time.

2. LITERATURE SURVEY

Regarding the online meal system, it appears that people respond to the e- meal portal much more than conventional restaurant. The points that includes in examined base paper is

The Traditional paper-based system One of the widely used food ordering schemes is the traditional paper based system. In this system all records are stored on paper. The main drawback of this system is papers can get easily lost or damaged. There is also wastage of money, time and paper. Paper-based systems do not provide any form of dynamicity. Even a small change requires the entire menu-card to be re-printed. Since large manpower is required, this system is time consuming from a customer's point of view.

The next improvement in restaurant industry was waiting of order at that place more time. The waiters take order

form customer given to the kitchen, then cook and receive back to order after lot of time, waste of time is more in traditional system,.

While the base upon the research on **other online food ordering system** food ordering is designing a online order system, one must focus on the issue of customer control, since your customers will most probably be using the user system. The survey included a variety of questions on respondents' food ordering behavior, several items on their use of various ordering methods, and a series of questions designed to measure perceived control, perceived convenience, need for interaction, technology anxiety, satisfaction, and intent to use the self-service technology or recommend it to others.

To overcome the above system **online meal ordering** is a process of ordering food from a website or food cooperative through a web page. Much like ordering consumer goods online, many of these allow customers to keep accounts with our portal in order to make frequent ordering convenient. Show in table 1.

Portal / Options	Providers	Meal options	Model	Cost
Other websites	Restaurants	Fix as per restaurant provide	Business to customer	Expensive
Our website	Small scale meal provider including homemaker	Customizable as per customer choice	Business to business , business to customer	Cheap as compare to restaurant food

Table-1: Comparison between meal services.

If the strategy is low cost , then decisions on planning, pricing and designing menu reflect the strategy through selecting low cost menu items, pricing menu items at a lower price and attractively presenting menu items with low prices on e- menu card, which probably result in customers' perceptions of a satisfactory meal experience with a reasonable quality. Conversely, when a differentiation strategy is chosen, a website admin is expected to be attentive to selecting or innovating unique menu items, 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 for ordinary customer.

The food items will be sorted according to customer ratings in its own created account. This helps the customer to find or select a food item which has a good rating and which is liked by own. This also helps the small scale meal distributor owner to make changes in a particular food item if it has low ratings which improves the quality of food.

The survey's of online ordering found a relatively even split by gender (with slightly more men, at 51.9%). The age distribution was fairly representative of the India population. Show in below Table 2.

Variable	Description	% who use online ordering	Variable	Description	% who use online ordering
Gender	Female	45.0%	Age	18-24	69.5%
	Male	51.9%		25-34	77.9%
Local	Urban	59.8.%		35-49	55.4%
	Suburban	49.1%		50-64	32.9%
	Small town	36.4%		65+	21.1%
	Rural	23.4%			

Table-2: Survey of online food ordering.

3. REALARED WORK

3.1 Limitations of regular meal services:

- Limited food options available due to few resources and less customers.
- Customers don't have flexibility to choose food options.
- No feedback mechanism available even if available then it is not that much efficient.
- Don't have proper options to choose quantity and quality.
- Cancellation of meal is quit hectic.
- To change meal provider it takes lots of time.
- Service like online payment is not available in many cases.
- Discount and offers are not available.

3.2 Proposed solution for regular meal service:

Using web portal following operation can be done to overcome with the problems that associated with regular meal services.

- Costumers and meal providers sorted according to area.
- According to the costumers choice and their weekly plan's select provider
- Count and analyze total orders and available meal options i.e. menus.
- Select which meal delivers to which costumer.
- Shuffle providers and costumers every week or possible adjustment because due to this customer will get maximum varieties.
- Delivery boys will get costumers address/number and provider details before 1 hour of delivery.
- Some providers can also provide home delivery so they will get costumers address and number before delivery of meal.
- When meal delivery is done costumer will give conformation of delivery through delivery boy or call/message or on website.
- Next day costumer can give feedback on website or through delivery boy.
- According to feedback again analyze data and make different selection or continue with the same provider.
- Bill will be generating at the end of month or as per plan deducting cancelations.
- Payment will be delivered to providers and delivery boy's according to their delivery count and their price.

3.3 Website Architecture:

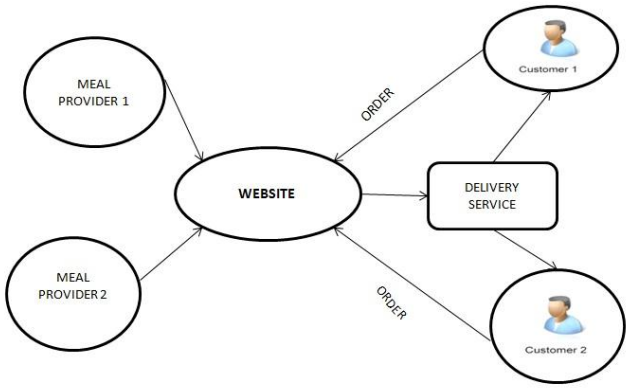

Fig-1: Website architecture

Website architecture contain the basic things like website, customer, meal provider and delivery service that all work together to form a system of online meal system.

Conceptually this system is built using following Components:

- Meal provider provide different meal option on website but those all options are not directly visible for customers because they all are sort out in backend to provide require meal order for customer.
- Different customers can register on website and that time they can enter their choice and also the plans that they want to select.
- According to the customer's requirements delivery service will deliver the meal on the address that given by the customer.
- Customers will get his/her bill as per plan like weekly or monthly and customer can pay the amount by using the way like COD.
- On the backend of website meals and customers are sort out by administrator so that
- Customer will get its require meal as per there requirements and choice.

3.4 Website Module and Its Working:

User module:

- User will initially come and register on website and they will fill up choice from that provided by website.
- When registration is completed then user can order meal according to plan that they had selected.
- User can cancel their meal by using website or call on the portal number.
- According to users meals bill will be generated and deliver to user.

Admin module:

- Admin can add or remove users.
- Admin can add meal provider according to their request.
- Admin can add new meal options on website as per meal provider provided.
- Admin will carry out analysis of orders and payment.

Meal provider module:

- Meal provider can register on website and they can request to join as meal provider for portal.
- When their request is accepted by admin they can provide meal list to the admin and after that they can provide meal for users.

3.5 Analysis:

In our website we are using direct interaction of small meal providers to the customers rate of meal is decrease as compare to other online meal provider as follows:

Sr. No.	Meal option	Making cost including profit Approximate (In Rs.)	Delivery charges and brokerage approximate (In Rs.)	Price on other portals Approximate (In Rs.)
1	Vegetarian (thali)	60	15	75
2	Non vegetarian (chicken thali)	110	15	125

Table-3: Other online meals providers cost of regular meal

In our portal cost of meal is decrease up to 26% given as follows:

Sr. No.	Meal option	Making cost including profit approximate	Delivery charges and brokerage approximate	Price on our portal approximate	Reduction in price of meal %
1	Vegetarian (thali)	40	15	55	26.66 %
2	Non vegetarian	90	15	105	16.00 %

Table-4: Meal cost on our portal

4. CONCLUSIONS

In this paper, we present an online meal ordering system based on B2B and B2C model .This system is convenient, effective and providing more facilities to customers. It will also provide quality of service and customer satisfaction. Overall conclusion is that, this is a fabulous meal ordering system for any type of customer using web technology.

In next phase, we are working on providing groceries for meal provider in cheap cost so that meal cost will be decrease and quality of service will be improves.

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