Automated Wi-Fi Oriented Digital Menu Card

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Abstract- In the restaurant business "presentation is half of the experience!" Traditional menu cards are expensive, difficult to maintain and over the period of time it lose its "worthy appearance". It is quite difficult to update paper menu card i.e.: new prices, dishes and ingredients. Paper menu card needs manual work where the waiter has to look after the order and the order table. Waiter has to ensure that correct order is placed on correct table. Crowded food zones add to the problem of the waiter. Apart from all these problems, time delay is major issue. One of the important objectives of every industry is "Just in Time" customer service. "**Automated Wi-Fi Oriented Digital Menu card**" overcomes all the problems mentioned above. Other dimension to propose this new system is to reduce the need of excess manpower and to eliminate excess time spent on placing the order through the waiter.

Key Words: Menu card, Digital, Automated, experience.

1. INTRODUCTION

We occasionally visit to various food zones may it be restaurants, hotels, pizza hut ort coffee shops. This is one sector that is visited by maximum population, hence it is obvious that there will be a great competition within this sector. Then sector which provide best service will be visited the most.

Hoteliers and hotel employees pay a close attention to ensure how they can fulfill their customer's expectations. The food zones look after various aspects such as:

- Cleanliness
- adequate safety and security
- Food varieties
- Customer service on time

Any vulnerability found in above aspects can cause threat to their reputation. The food zones should ensure that customers once visited will visit again based on the impressions they carry. Time factor is the most important among all the above mentioned. Faster the service more the customer will visit the respective food zone.

Problems Encountered

- Many a times it becomes difficult for the waiter to remember the correct order and the table number. He has to ensure that correct order should be served on the correct table, crowded hotels add to this problem.
- Another issue is 'time delay'. It takes ample of time to place the order through waiter and Serve the food to the customer as per the order and to produce the bill at the end of the course.
- More manpower creates maximum problems.

Existing Systems

1. Paper Based Menu card
2. Self-service KIOSK technology

Observation Made

- Simple working.
- Manual work required
- Difficult to manage
- Not efficient to manage

2. LITERATURE SURVEY

- Survey to various food zones was conducted. The very first place to visit was "SSK Restaurant" at Chandak Circle.
- We found that there is enormous development in order to meet the customers need. With the advancement in technology new facilities were provided.
- Wireless-Fidelity
- LCD for entertainment
- Sound systems etc.
- Difficult to manage.
- Not efficient to update .

Paper Based Menu Cards

This system is used mostly in restaurant.
In this, paper-based menu card is offered to customers and the waiter uses notepad to write down the order of customer.
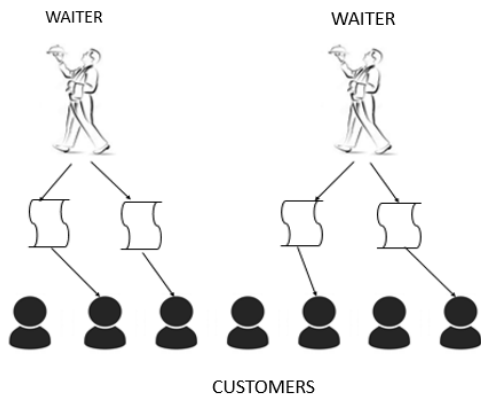
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Fig: basic working of paper-based menu card

Limitations

- Paper work is difficult to maintain.
- Paper can easily get misplaced or damaged.
- At the crowded food zones difficult to manage order.

Self-Service Food Ordering Kiosk Technology

KIOSK is a free-standing counter which is similar to Check out. It displays all menu including food items and available payment mode.
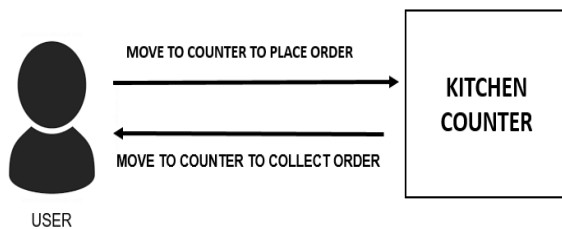

Fig: basic working of self-service food service

Limitations:

- Customers find it inconvenient to move from their table to order food.
- Customer has to collect the order when ready.
- It becomes inconvenient for the customer to add to previous order.

Proposed System
- Paper based menu card is replaced by digital menu card.
- When the customer enters the restaurant's Wi-Fi zone, he/she will easily be able to connect to an application.
- Acceptance to the application will authenticate him/her to the digital menu card with the help of QR scan.

- Any order selected by the customer will simultaneously be displayed on the display board at the kitchen as well as at billing counter.

Objective
- Renewal of menu items and prices from a single location.
- Scheduling different menus at the different time of a day e.g. Breakfast, Lunch and Dinner Menu.
- Provision to add special themes, promotions and videos.
- Easy install and update.
- Manual working will be minimized.
- The proposed solution will be more economical.
- The proposed solution will provide faster service.
- The system will easily store the data associated with the customers, their orders, service and billing.
- The stored data can be utilized further for analysis.

3. METHODOLOGY

Customer operates the tablet at the very first time when he or she enter the food zone. Login page is provided, where the customer enters his number.
Menu card is displayed when the customer is logged in.Menus are selected, quantity is specified with necessary comments and order is placed. He order detail simultaneously displayed on two screen:

    1) Kitchen counter display
    2) Billing counter display.

Priority for service is decided depending upon the arrival time of the order .I.e.: using FIFO algorithm.
The chef view the order update status i.e.: preparing or ready. Default status is waiting. The customer can add to his order before bill is generated and gets logged out once the bill is generated. The customer details such as mobile number, order placed by him and total bill generated is saved at billing counter or the server side.
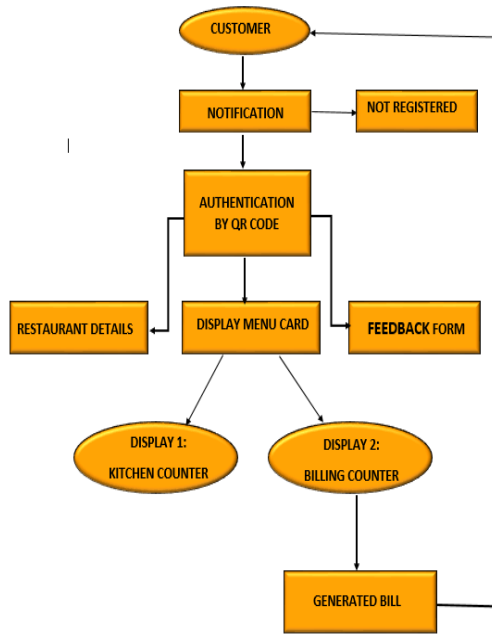
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FIG (1.1)

4. CONCLUSION

This proposed system will be highly beneficial for the all kind of food zones. One of the important objectives of every food zones is "Just in Time" customer service which will be achieved through this system. Reduction in manual work will boost the system. customers will hereby find it more convenient to place their order. Elimination of paper work will save the cost of printing the menu card.

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