
LITERATURE REVIEW ON RESTAURANT MANAGEMENT SYSTEM

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ABSTRACT

In our system offers an online food ordering platform that provides convenience for customers and addresses the limitations of traditional queueing systems. It offers a hassle-free way for customers to order food from restaurants and mess services. The system enhances the process of taking customer orders by providing an online food menu, which allows customers to easily select their desired items and track their orders. Additionally, customers can provide feedback on their food items, which helps to inform hotel staff of areas for improvement in quality. The system can also recommend hotels and food based on user ratings. Payment options include online payment or pay-on-delivery, with separate accounts for each user, which ensures secure ordering through individual IDs and passwords.

Keywords: Food Ordering System, Dynamic Database Management, Smart Phone.

I. INTRODUCTION

The restaurant industry has been greatly transformed by technological advancements, particularly in point-of-sale operations. The use of e-menus has revolutionized the way customers interact with menus, providing them with more detailed information about menu items and drinks compared to traditional paper menus. This has improved the ordering process by making it simpler and more accessible.

The benefits of e-menus go beyond just improving the ordering process. Restaurants can now build their e-reputation and engage with customers in real-time. With digital tablets and touch screen technology, menus have evolved from simple chalkboards and printouts to detailed and colorful displays. Orders can be taken accurately the first time, reducing the need for servers to run back and forth to a distant terminal.

E-menus also enable orders to be associated with individual seats at a table, ensuring greater accuracy and reducing errors. Modifications to orders can easily be made, and the cost can be calculated in real-time. Recommendation algorithms can even suggest dishes based on previous orders, making it easier for customers to build their orders and view the most popular dishes. Various filters, such as price, taste, and quantity, can be used according to individual preferences.

In summary, e-menus have transformed the restaurant industry by providing customers with more detailed information and simplifying the ordering process. They have also enabled restaurants to engage with customers in real-time and build their e-reputation.

II. LITERATURE REVIEW

[1] A snack organizing scheme has existed grown to organize the process of identifying orders in miscellaneous outlets. The system is devised to capably control consumer orders by providing the alternative to order pre-set parts or custom-make orders accompanying just individual click. This whole has existed executed as an Android use for Tablet PCs. The program that controls display was founded utilizing JAVA and Android, while the backend promotes a MySQL table.

[2] The system adopts that consumers will be utilizing smartphones to place their orders. Once the consumer lands at the outlet, they can prove their preserved order completely by affecting their smartphone screen. The list of pre-picked articles will open or fan out on the room for cooking food screen, and upon ratification, an order slip will be impressed for further deal with. This answer facilitates the pre-order process for clients, making it a more nearby alternative.

[3] A mathematical eating arrangement for inns was planned and achieved, promoting Android electronics. This structure is stimulated by a vital table serviceableness that retrieves all inevitable facts from a concentrated table. The handy request has experienced to raised adeptness and veracity in joint movements, while still lowering human wrong. This structure has overcome former imperfections of mechanized fare arranging structures, and demands only of highest quality-period expense in device. The use of netting duties electronics to mix inn administration plans is expressed in [4].

By means of the Digital Hotel Management arrangement, miscellaneous inn spreadsheet methods in the way that the Ordering System Kitchen Order Ticket (KOT), the Billing System, and the Customer Relationship Management plan (CRM) maybe connected together. This resolution is fit friendly the adding or growth of lodging operating system structures, making it appropriate for lodging chains of some amount. The objective of the research bestowed in [5] search out design a Wi-Fi drink organizing whole for use in dining rooms. The Wireless Ordering System (WOS) was devised and grown, accompanying a devote effort to something allure mechanics movements, plans design, functions, restraints, and pieces of advice. The authors plan that as handheld ploys in the way that PDAs enhance more usually secondhand in inns, extensive uses like WOS will enhance more and more main finishes for reconstructing administration effectiveness, underrating human mistakes, and improving the characteristic of department dealing with customers.

In [6], a Wi-Fi cooking organizing scheme was devised and achieved, as well a consumer response arrangement, for use in saloons. This order admits outlet partner to surely start bureaucracy in a Wi-Fi atmosphere and restore card performances as wanted. The system more combines smartphones, that have happened joined into a customizable fare arranging plan, and involves honest-opportunity client response use to allow ideas 'tween dining room landowner and clients in actual-period. The objective of the research bestowed in [7] search out analyze the determinants that influence the stances of Turkish academy pupils the one use the computer network toward connected to the internet meat commanding. To carry out this, the authors handled the Technology Acceptance Model (TAM) initially grown by Davis in 1986 to study the maintenance of netting-located atmospheres for foodstuff arranging. In addition to TAM, the authors additional trust, novelty, and extrinsic influences as main determinants to the model. In [8], the research aims to mechanize the meat authorizing process in outlets and reinforce the overall eating knowledge for consumers. The authors argue the design and exercise of a meal commanding whole for inns, that appropriates Wi-Fi dossier approach to servers. The system contains an Android use that holds all cuisine analyses, admitting consumers to place orders wirelessly utilizing their movable tools. The room for cooking food and cashier accept these order analyses, that are therefore refurbished in the principal table. Additionally, the inn partner can surely accomplish card modifications utilizing this whole.

[9] focuses on the works fashioned by cafeteria holder to select news and ideas sciences to a degree PDAs, Wi-Fi LANs, and damaging multi-touch screens to enhance the eating knowledge. The paper more explains the restraints of unoriginal paper- located and PDA-located foodstuff organizing orders and suggests a cheap touch screen-located Restaurant Management System that handles an Android smartphone or capsule as a answer.

III. EXISTING SYSTEM

The current system used in many restaurants relies on paper-based menus and order-taking methods. While this may be traditional, it has numerous disadvantages. For instance, papers can easily get damaged by stains, lost due to accidents or fires, or misplaced in general, leading to wasted time and money. Furthermore, making changes to the menu requires reprinting the entire menu card, resulting in unnecessary wastage. It is also difficult to access a specific record from the stack of papers, making the system time-consuming.

Customers have to physically visit restaurants to learn about food items and place their orders, which can be inconvenient and time-consuming. Ordering over the phone is also problematic, as customers lack a physical copy of the menu item and cannot confirm their order visually. Additionally, restaurants must hire employees to take orders and process payments, which can be costly and challenging in today's market, where labor rates are continually increasing.

Moreover, the traditional paper-based system can result in errors, such as misinterpreting a customer's order and serving the wrong dish. Customers may also have to call their waiter multiple times to place their order, which can be frustrating and inefficient. Overall, the paper-based system used in many restaurants is outdated

and inefficient and can lead to numerous problems for both customers and businesses.

ADVANTAGES

1. Avoiding waiting time of staff members.
2. Provide further information on electronic menus.
3. Customer and waiter will not come under pressure while giving order and taking order.
4. There will be benefit of admin while taking e-payment and cash payment.
5. Easy way to manage Restaurant.
6. No tension of calculating the total order in calculator i.e. all the total bill will be automatically calculated.
7. It will remove the work force from the admin.
8. Billing errors will be avoided means the bill will be auto generated.
9. Ordering error will be avoided all the order will be shown to the admin panel and chef for preparing order.
10. Menu card will be changed by the admin but the QR code will be same.

FEATURES

1. Fast wireless ordering operation with improved customer service.
2. Secured and Accurate wireless transfer of Order.
3. Easy tracking on Running and cancelled Orders.
4. The billing is done simultaneously at the time of order taking.
5. No manipulations in billing and secured transactions.
6. Increase in table turnover, sales and profitability.
7. Smooth flow of communication between service staff and kitchen.
8. Optimum staff utilization reduces the labor cost.

IV. CONCLUSION

As time passes and smartphones become increasingly popular, their impact on various aspects of human life becomes more evident. Therefore, people tend to use technology in different situations more frequently, which presents an opportunity for restaurant owners to take advantage of this trend by providing advanced technology. By using QR codes in the ordering process, physical ordering and payment can be eliminated, and customers and restaurant managers can enjoy more benefits. The goal is not only to replace traditional ordering, but also to offer this smart ordering alongside the traditional method to attract customers and improve their loyalty. Additionally, this method can reduce staff members' time and energy, ultimately leading to greater customer satisfaction.

Table 1: Comparison of Existing POS System Solution

| POS System | Table Service | Stock Control | General Reporting | Advanced Discounts | Kitchen Display | PDA Order Input |
|-------------|---------------|---------------|-------------------|--------------------|-----------------|-----------------|
| Sucess | Yes | No | Yes | No | No | No |
| RPS(HOSPOS) | No | Yes | Yes | No | Yes | No |
| Abacre POS | Yes | No | Yes | Yes | Yes | No |
| eZee Burrp | Yes | Yes | Yes | No | Yes | No |

V. REFERENCE

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