

Computers in Catering: Digital Dining

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Abstract: In earlier days, food ordering was a completely manual process where a waiter used to note down orders from the customers using pen and paper, take the orders to the kitchen, bring the food and make the bill. With the advancement in the computer and communication technology, various systems were launched in market for the purpose of automation of the food ordering system. Some of the existing systems are: Q-order, The PDA (Personal Digital Assistant) based system & AOS-RTF (Automated Food Ordering System with Real Time Customer Feedback) System.

Android smart phones attract both the general and commercial (i.e. Business) users. Hence, considering the promising future of Android market, it is beneficial and worth to write applications for android that target masses of people. It will also provide quality of service to the customer. It is a revolutionary food ordering system for the restaurant sector, made by combining the Android and Wireless technology.

Keywords: Computers, catering, Food establishment, Q-order, PDA, AOS-RTF

I. INTRODUCTION

The Hospitality industry especially the restaurant sectors are gaining a rising importance worldwide as they have been supporting the economy for decades. Since their introduction in the 1980s computers have helped workers in business to perform their jobs with more efficiency.

Workers can research information from the internet with a click of the button. The importance of computers in business also has many other positive benefits in the work force. Computers in business allow for greater interaction among employees, agencies, clients and customers. Improved food ordering technology has greatly influenced the hospitality industry.

In earlier days, food ordering was a completely manual process where a waiter used to note down orders from the customers using pen and paper, take the orders to the kitchen, bring the food and make the bill. Although this system is simple it requires extensive investment in purchase and storage of paper, large manpower and is also prone to human errors and greater time consumption. In order to overcome these limitations in manual system, some systems were developed later like PDA based systems and multi-touchable restaurant management systems to automate food ordering process.

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computer and communication technology, various systems were launched in market for the purpose of automation of the food ordering system. Some of the existing systems are:

1. **Q-order:** The next improvement in restaurant industry was 'QORDER'. The waiters now no longer took the orders on paper instead all the orders were taken on a handheld device called the 'QORDER'.

It was an android device where the waiter enters order information on the touch screen and then sends it to the kitchen for processing. Once the guests are done, the waiter prints the receipt out and processes payment with the handheld unit.

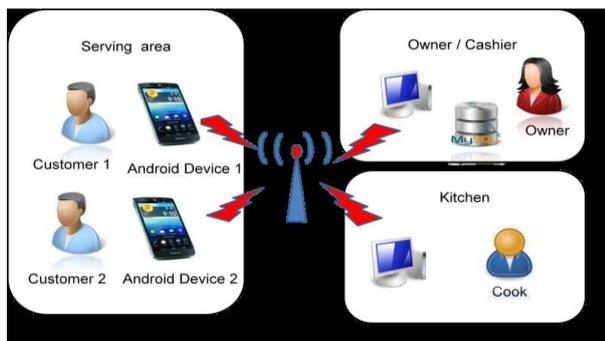
2. **The PDA (Personal Digital Assistant) based system-** The main feature of PDA systems was that customers or waiters are the key in ordering process. The wireless food ordering systems such as WOS, i-menu & FIWOS are some of them. But this system also had several drawbacks. PDA-based system increased the restaurants expenditures as many PDA's were required during peak hours. PDA systems also did not provide any real time feedback from customers. Menu cards in the PDA's were unattractive and uninformative as it did not support images. To overcome the limitation in PDA based system we proposed an automated food ordering system for restaurants with real time customer feedback (AOS-RTF).

3. **AOS-RTF (Automated Food Ordering System with Real Time Customer Feedback) System-** It is a wireless food ordering system using android devices. Android devices (tablets and mobile phones) are extremely popular and have revolutionized the use of mobile technology in wireless environment. Android is a Linux based operating system for mobile devices such as smart-phones and tablets. The programs are primarily written in customized version of java by the developers, and then the apps can be downloaded from online stores.

The system architecture of AOS-RTF depicted covers the three main areas of restaurant: the Serving area, the Kitchen, and Restaurant-Owners desk (Cashier table).

Conceptually the AOS-RTF is built using four main components:

- The android application on customer's android mobiles to make orders.
- The server and web applications on the restaurant-owner's laptop to customize menu and keep track of customer records.
- The central database for restaurant-owner to store updated menu information and order details.
- Wireless infrastructure to support networked communication.



II. SYSTEM DESIGN

Firstly the restaurant owner will log into the system and update the menu and advertise the promotion strategies. The customer has to login the system so that the system can assign identification number to the ordered menu. The customer information and menu choices are sent to the system over wireless network. The restaurant owner and the kitchen staff will receive the ordered lists from the system. The restaurant owner can update the order status into the system. The customer can thus view his order status. After having the food customer can make payment

and can enter feedback regarding restaurant system and services.

III. CONCLUSION

Android smart phones attract both the general and commercial (i.e. Business) users. Hence, considering the promising future of Android market, it is beneficial and worth to write applications for android that target masses of people. It will also provide quality of service to the customer. It is a revolutionary food ordering system for the restaurant sector, made by combining the Android and Wireless technology.

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