REVIEW PAPER ON RESTAURANT RESERVATION AND MANAGEMENT

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ABSTRACT

The term "restaurant" is derived from French terminology that means "to restore/revive oneself." Restaurant pre-booking systems have become an essential component of restaurant chains that use technology to improve day-to-day operations and increase customer satisfaction. Customers can book a table online using restaurant reservation software, and owners are notified of new bookings, postponements, or no-shows. It entails taking orders, booking personalized orders, enforcing cancellation policies, resolving queries, booking events, and so on. Table In, Eat App, Open Table, Zomato, and other similar applications or software are the best for restaurant reservations. These systems offer secure payment options, as well as user-friendly and live customer interaction. The reservation system has improved the dining experience over the years. The primary benefit of a reservation system in the digital age is that it promotes brands, provides customer satisfaction, and increases profits. This can be used by smaller restaurants or new cafes to organize events that will bring customers to their establishments.

Keywords: Table booking System, Restaurants Reservation Software, Pre-booking system.

1. INTRODUCTION

Hotel Management is part of the Hospitality Industry including management. Restaurants are the places where people visit to taste different cuisines. Restaurants are a purely service-based sector. Usually, they keep engaging new ideas to make their customer experience better and encourage their customers to visit their place again and again.

The word Restaurant comes from the French terminology which means to restore/revive oneself. When someone gets bored of the regular homemade food or has to spend time with their loved ones - restaurants serve the best place to meet these expectations. Even corporate meetings are scheduled at lunch (1. Daud et al., 2019).

The traditional approach of the restaurant management system - One needs to visit the restaurant, look for a place to dine in. Sometimes the people have to wait for the waiter to take their call or get a place in the restaurant due to demand making the customer feel frustrated. The journey of the restaurant management began from the manual method to recording the meals order and bills in the software system. However, as the technology is moving faster the demand is shifting more towards digital methods. (2. Maranan et al., 2020). Restaurant pre-booking systems have become an integral part of restaurant chains that utilize technologies to improve daily operations and increase customer satisfaction. This review paper provides a critical analysis of the Reservation system of Restaurants highlighting - their functioning, advantages, limitations, and future scope (15. Thompson,2007).

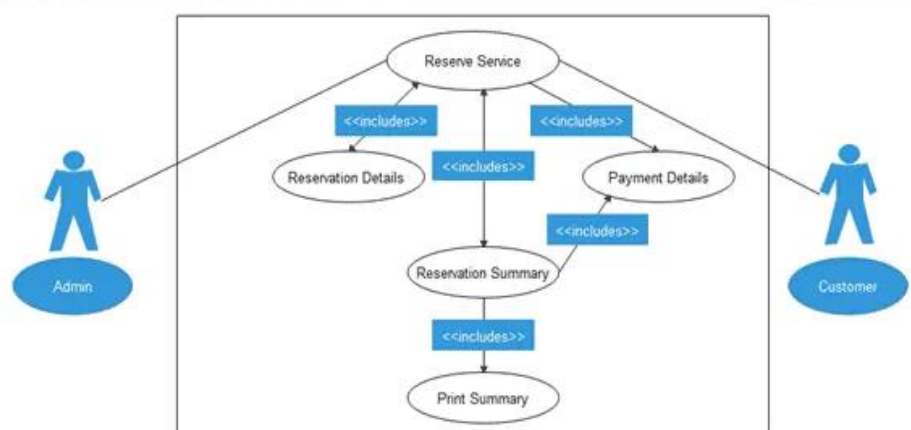## 2. DISCUSSION- WORKING OR FUNCTIONING OF RESTAURANT RESERVATION MANAGEMENT

After going through a detailed analysis of different 24-25 Restaurant Reservation Management Software/systems. We can conclude the best functionality of reservation systems upon their usability and affordability. The common function of this Reservation is Management in- Communication, Table Management, Waitlist, and Engagement return. Restaurant reservation software allows customers to book a table online and notifies owners of new bookings, postponements, or no-shows(3.Kumar et al., 2020). An online reservation system, on the other hand, may include in-house table planning and waiting list characteristics to regulate occupancy rates, as well as the ability to sell tickets to the event online. The booking can be done from the official app or website of the restaurants or through Mobile phones. The complete Reservation procedure includes the following activities-

The complete Smart bottle includes the following activities-

- Providing the schedule for the booking
- Taking orders or Answering booking calls.
- Selecting the seat or table.

- Acknowledging if any special arrangement is required.
- Acknowledging the queries.
- Taking feedback of the Experience.
- Virtual Assistants.
- Providing details of the booking
- Cancellation and postponement booking
- Menu available in the Restaurant
- Offers and Discount available
- Event booking.

Figure 1: Working and Functioning of Restaurant Reservation Management

3. TYPES OF RESTAURANT RESERVATRION SOFTWARE

The list of best Restaurant Reservation Software (14. Rarh, 2017)

Function/Services	Name of the Software
Overall Services	Table In
Customization	Resy OS
Ease of Use	Eat App
POS system	Open Table
Customer Connecting System	Yelp Guest Manager
Free Software	Gloria Food

Table In is one of the best applications for the small restaurants and provides overall services. It provides easier application installment and works best for online ordering and other services. Resy OS allows restaurant owners to personalize every component of the application phase, attempting to make it the big favorite in the classification of best for personalization. Eat App gives across the board usefulness to regulate table appointments, plan for inhabitants' cutoff points, an audit examination (4. Mwanyolo,2021). Its administration applications, visual designs, and altering instruments are easy to use, procuring Eat App the top space for usability. Around 31 million users use the Open table software to book tables and it has more than 600 affiliate restaurant partners. Yelp Guest Manager connects with the customer and provides a real-time customer engagement system. Gloria Food application provides free application of the reservation system for your

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restaurant. Apart from these Zomato and Swiigy also provide reservation facilities to their alliance restaurants and cafes.

Figure 2: Dining at Restaurant

4. FEATURES OF RESTAURANT RESERVATION SYSTEM

Secure Payment Methods

More than 65% of customers visiting restaurants opt for digital payment modes. The reservation system ensures to provide fully secured payment gateways along with multiple payment methods (12.Gupta,2009).

User Friendly Database

The reservation system provides a quicker and more user-friendly process for consumers. It gives the clear-cut policies of the cancellation procedure and charges. Along with that track option, discount and vouchers.

Pre-Ordering Option

These options make sure that the customers do not want to put it on hold for the restaurant's meals to be planned and that the bookings are not canceled.

Live Menu

The visually appealing menu makes the customer visit the restaurant again and again. It also provides details of the cuisine available at the restaurants. Food content attracts more bookings(5.Fernadez et al.,2020).

User Interaction

It assists the virtual communication with the customer providing them a more personalized experience and analytics of their engagement.

5. SCOPE FOR SMALL RESTAURANTS AND CAFE

The major advantage of the Reservation system in the digital age is that it provides brand promotions, customer satisfaction, and profit expansion. For smaller restaurants or new cafes, this can be used for Arranging events to bring customers to their places. The ease and use of the operating system are important for your business since it influences the mechanisms and revenues of your restaurant(6.Piyatissa et al., 2021). The reservation function has made the dining experience better than before. There are different software applications that provide minimal charges or are free for small restaurants. And for bigger restaurants, they can own their personalized reservation system and make their customer experience better.

6. LIMITATIONS OF THE RESERVATION SYSTEM

Along with the advantages there are some drawbacks to using the Restaurant reservation system. The pre-booking and last moment cancellation may lead to empty tables and waste of the arrangement made beforehand. In the case of the smaller and average restaurants, the cost of cancellation would be painful (7.Bagaskara et al.,2021). The pre-booking or reserved table might disappoint the walk-in customers. One cannot completely survive with the reservation system. Overbooking might pressurize the staff during peak

times. Contingent upon how reserved you could get, it might turn out to be excessively hard for certain individuals to at any point attempt to eat at your business. This kills the potential for new clients.

7. ALTERNATIVES OR CHANGES IN RESERVATION SYSTEM

The drawbacks of the reservation systems can be managed with some of the alternatives to make the process more profitable. In order to avoid overcrowding, the pre-booking can be done on a time slot basis. There should be a proportionate amount of tables for reservation and walk-in customers. To ease the disappointment of not getting a table, the restaurant can update the waiting list for the customer (13. Miao,2018) Providing the front office staff's training for proper utilization of the reservation database. Keeping a limited time limit for the reserved seat would not cause unnecessary conflicts with the customer.

8. RELATED STUDIES OR MARKET SURVEYS

According to the view of (8. Cheong et al., 2010), Restaurants have always tried to provide the best possible services to their customers. To prevent the wait time for customers or make any arrangement at the table, the restaurant has introduced a pre-booking system. The traditional method of pre-booking was done over the phone calls, where the restaurant staff had to take the pre-orders. It cost the staff member valuable time that they could have spent on cleanup or customer service. The introduction of online processes has changed the outlook of table planning, simplifying the complete experience and improving the existing for all stakeholders.

The study of (1. Daud et al., 2019), provided a case study of Makati Restaurant that used a manual pre-booking method for taking orders. As technology demand was increasing Makatte restaurant developed a model of Electronic Customer Relationship Model to manage the order reservation and other related functionality. To the surprise, it made the customer experience better than before and added a personalized dining experience for the users. Online reservation permit systems aid in even more sales forecasting estimation from customers, allowing for better procurement and resourcing, as well as more fruitful revenue management(11.Min,2009). According to Kimes (2009), one-third of 696 diners made online reservations. Customers can save money when using an online booking system rather than other methods.

Looking at the present scenario and technology advancement, the Reservation method serves multiple purposes for the restaurant owners, managers, and consumers. With the right technology of Restaurant Reservation Management, the restaurant can take orders, manage the tables and dishes, and along with that have customer engagement reports (9. Liyanage et al., 2018). The best thing is that it keeps direct interactions with the customer. Once the customer has done booking with the reservation system. It sends them information about the discounts and special offers- making them appear again at the restaurant.

Comparative Study

A table of comparison touching various factors like method/technology used, features and limitations of reviewed researches and projects.

RESEARCH PAPER	METHOD/ TECHNOLOGY USED	FEATURES	LIMITATIONS
1)	- Adapted waterfall model of SDLC and eCRM using E Masters. - E Masters for electronic Customer Relationship Management.	- Provides an online mechanism for reservation of restaurant. -Management of the record of all the tables.	- Improvement of eCRM to improve on customer engagement.
3)	-Web Application -SDLC	-This application aims at bring all the services together for the customer like Table Boking , Ordering Food with available menu, Takeaway from restaurant and providing food. -It is an android application which	-Lack of monitoring of activities or report generation.

		provides the user interface over mobile phone for customer and admin ease. -Common application which locates nearby restaurant and check the availability of tables and food.	
5)	SDLC	-Provides platform for viewing and managing events and activities at restaurant or hotel. -Monitoring activities by generation of reports and logs.	-Platform Dependency. -Unavailability of Ordering and delivering food.
8)	- Adobe Flash ActionScript 3, PHP scripting and MySQL database.	- Customer can view different menu using filters to order food over this platform, no need to waste time by manually ordering food. - Order Directly reaches to management and kitchen counter which improves accuracy and efficiency. Digital operations for restaurant management staff.	-It doesn't consider any parameter outside the restaurant for online booking or takeaway service.
14)	-Time Series Prediction.	-Mobile application for customer and website for restaurant to manage. **For Customers:** Locating Nearby Restaurants. Selection and reservation of desired table for particular time slot. Selection of desired cuisine and dishes. Online Payment. Review and Cancel Reservation. **For Restaurant:** Categorization of Tables. Addition and Updation of Menu. Keeping Records of Customer. Loyalty or Bonus Points to Customers based on History. Approval and Cancellation of Reservations.	-Missing Customer Feedback . -Lack of monitoring of activities or report generation.

15)	-Research Based	-Efficient management as it reduces table turn time and saves customer time. -Pooling is more effective where there is high customer engagement, for larger restaurants, where average arrival time is very different from reservation time.	- No Special or preferential guest arrangement was considered during study. -Overbooking and Show Parties were not considered as a part of research.

9. CONCLUSION

Restaurants are purely a service industry. The journey of restaurant management began with the manual method and progressed to the recording of meal orders and bills in a software system. Restaurant pre-booking systems have become an essential component of restaurant chains that use technology to improve day-to-day operations and increase customer satisfaction. This Reservation's common function is management in-communication, table management, waitlist, and engagement return. Bookings can be made via the restaurants' official app or website, as well as via mobile phones(10.Deng et al.,2019). There are various applications and software available to help restaurants manage their reservation system. There are some disadvantages to using the Restaurant reservation system, in addition to the benefits. Pre-booking and last-minute cancellations may result in empty tables and a waste of the previously made arrangements. To meet the system's limitations, there should be a proportionate number of tables for reservation and walk-in customers, as well as limited-time booking and a waiting list. With the right Restaurant Reservation Management technology, the restaurant can take orders, manage tables and dishes, and generate customer engagement reports.

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