

## ORDER AND CROWD MANAGEMENT SYSTEMS

*A Case Study Implemented On*



## Challenges:

Let us talk about the issues faced in a traditional restaurant setup.



## Dining Experience:

- Customers have to wait for an uncertain time to get a table when the restaurant is completely occupied. They also have to wait outside so that they can be called when a table is free
- Customers wait for a long time for the waiters to get freed up at other tables to take an order
- Customers have no idea when their food is ready to be served
- Customers also need to communicate with the waiter repeatedly for further orders and bill which is again a waste of time.

- In case of future reservations, customers can only call the restaurant to book a table

### Management Of Restaurant:

- Restaurant owners have no visibility over the operations of the restaurant in real time
- No analytics are available to gauge the customer experience, feedback, efficiency, profits etc..
- Nothing can be done about the idle time of waiters engaged
- Floor manager or someone else have to be engaged to manage crowds which can be chaotic and affect customer satisfaction
- There is no scope to improve the efficiency
- Handling future reservations are difficult as the restaurant should have their own scheduler.

### Kitchen And Dining Operations:

- Chefs and cooks rely on waiters to communicate the customer order to them. This can be chaotic, inefficient and error prone at peak times
- Chefs and waiters need to repeatedly communicate with each other to serve their customers

## Solution:

The operations of the restaurant were modeled as a business process. Two applications were designed to orchestrate the operations of the restaurant - Order Management System and Crowd Management System.



A brief outline of the process is mentioned below:

## Order Management System

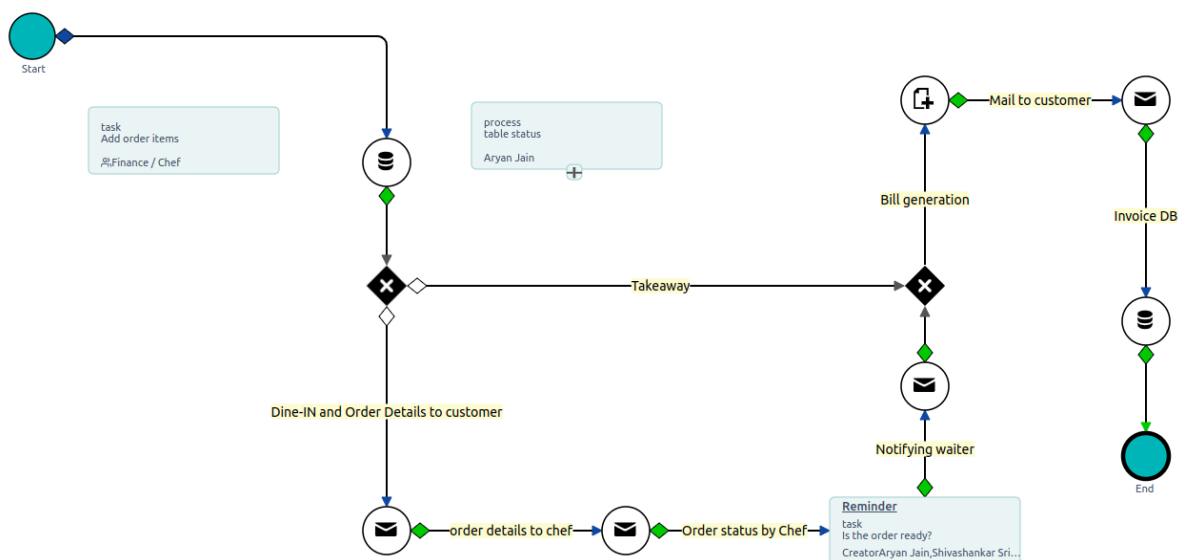
Customer can scan a QR code at the table to order food items of their choice from the menu shown

Once the order is placed, the details are captured in the system and notifications are sent to the customer to acknowledge the order, to the waiter to serve the table, and to the chef to prepare the order

The table status is changed to "Occupied" by the floor manager/waiter

Once the order is prepared, the chef can complete the task in the workflow which notifies the waiter to serve the order to the customer at the designated table

Customer can place further orders or request for an invoice. Invoice is auto generated with the captured order details and payment can be done digitally without any intervention.



## Crowd Management System

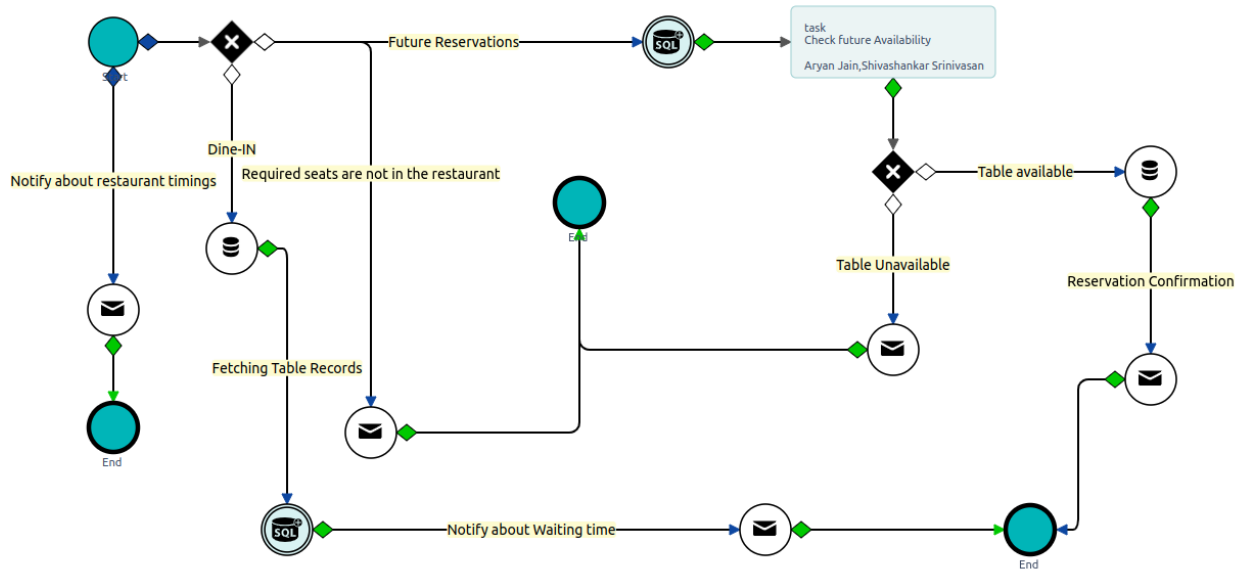


Customers can scan a QR code at the entrance of the restaurant to give their table requirement(number of people).

Depending on tables available at the given time, the system suggests the list of available tables to the customer, along with the estimated waiting time.

Notifications can be sent to the customer on nearing the reserved time/table available time

Different analytics can be made available to the owner in the form of reports using the data captured by the system



## Platform:

### High Level Features Of The Platform

Comidor platform which has superior workflow automation and Hyperautomation capabilities. BPMN 2.0 compliances, ease of access and use, low code features are the other major advantages that the platform offers.

- Modern digital workplace for the hybrid workforce
- Ready-to-use customizable business apps, intelligent workflows, and vertical solutions
- No-code / Low-code application lifecycle management framework for enterprise-grade apps
- BPM and Workflow Automation for end-to-end process modeling, automation and orchestration
- RPA, AI, and ML for task and process automation and data-driven intelligence and analytics
- Enterprise-grade cloud, security, support, and professional services



## Components Of The Platform

- Comidor data component- It helps in inserting, updating or deleting a record in the underlying data model of the application
- SQL Creator- We can execute complex queries and add condition to select specific records from the underlying data model of the application
- Task attributes- Assign tasks to chefs, customers and waiters.
- Email component- Send emails/notifications to chefs, customers and waiters.
- Document Creator- Create invoice as a PDF document using data captured in the system
- Built-In Report Application To Analyse Restaurant Operations like number of orders, profits etc...

## Key Results:



- The solution was implemented in 2 weeks. This is roughly 1/3rd the time it would take to develop the entire system.
- Smooth ordering, reservation, dining and billing experience for the customer leading to increased satisfaction and perceived brand value
- Restaurants can see an increase in repeat customers, a clear indication of increased loyalty

- Restaurant operations are more streamlined and efficient
- Restaurants can see an increase in sales and profits
- Structured data enabled easy-to-generate reports leading to less intervention and on-the-go management feature for the owner