Group 4 Project Option - Entertainment and Leisure
Movie Theatre

Overview

Thousands of customers patronize three local movie theatre branches every year. These theatres are known for their quality of service and their outstanding customer support. All three local theatres have been purchased by the same owner and merged into a single company, and they need a database to increase the efficiency, allow for scalability, and cut down the wasted time so as to provide a better experience for their customers.

Basic Operations

HR needs to be able to quickly look at and update staff information for tasks such as: recruiting/firing employees, maintaining policies, administering programs, and handling employee concerns.

Finance needs to look at and update salaries for paying employees.

Staff needs to know the current movie info, theatre room info, and inventory, both food and non-food, info so that they can help customers and put in orders for necessary items.

The registers for buying food/tickets need to be connected to the database for getting prices on items.

Tickets can be bought online and party reservations can also be made online.

Periodic online advertisements and promotions are made available.

Customers can become members to receive discounted prices and exclusive promotions.

Online customer surveys let the theatres know what movies are popular, what movies customers would like to see in the future, how they liked the theatre's service, and more.

Information Needs

Firstly, in the part of human resource, we try to collect information about all departments and their employees, just like names, emails, address, gender, phone number, etc.
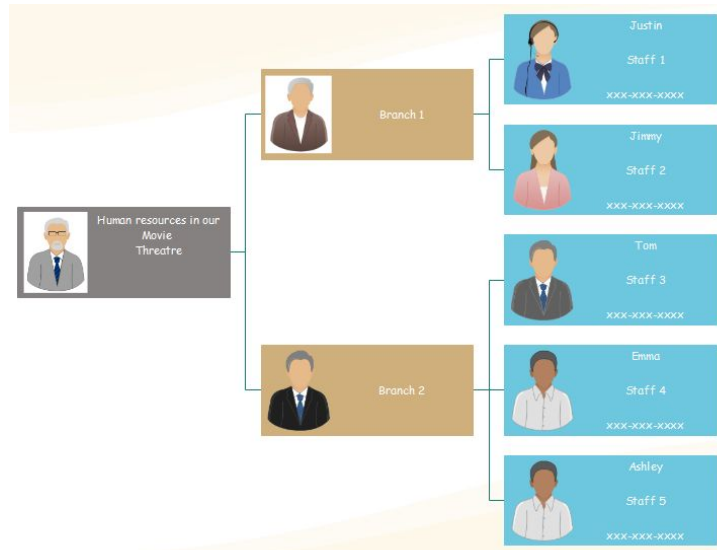

Figure 1 part of human resource

After that, because of our topic, famous movies can attract more people to watch, so we have a customer survey before them, it can help the theatre to choose films.

- Room
- Movie
- Number of seats
- Time
- Etc.

Record the price of food/tickets in the database. In food part, it includes prices of:

- Meal (e.g. Sandwich, hamburger, Fried chicken, etc.)
- Drinks (e.g. Coffee, Tea, soft drink)
- Dessert (e.g. ice-cream, doughnut)

Continuous buying and selling so the database of theatre should record the inventory and put the movies into archived movies.

In terms of advertising we will have to do customer surveys as discussed above in order to figure out the demographic for each movie/theater.

- Age range
- Money they are willing to spend buying for concessions
- Features they like(reclining seats, IMAX Sound, extra large screens)

We will also have to inventory all of our non-food supplies so we can detect theft or report faulty equipment with a good system to know where things are.

- Projector
- Lights
- Speakers
- Etc.

For the movies we need to figure out how many we can have and which are doing the best, also find a way to catalog archived movies.

- Figure out the number of screens each theater has and find a good number to screen
- Number of sales per movie
- Movies that have been out a while need to be archived if low ticket sells

Finally, it's about membership, includes customer volume:

- Names
- Address
- Phone-number
- E-mails

In this way, user can choose methods of payment:

- Tickets bought online
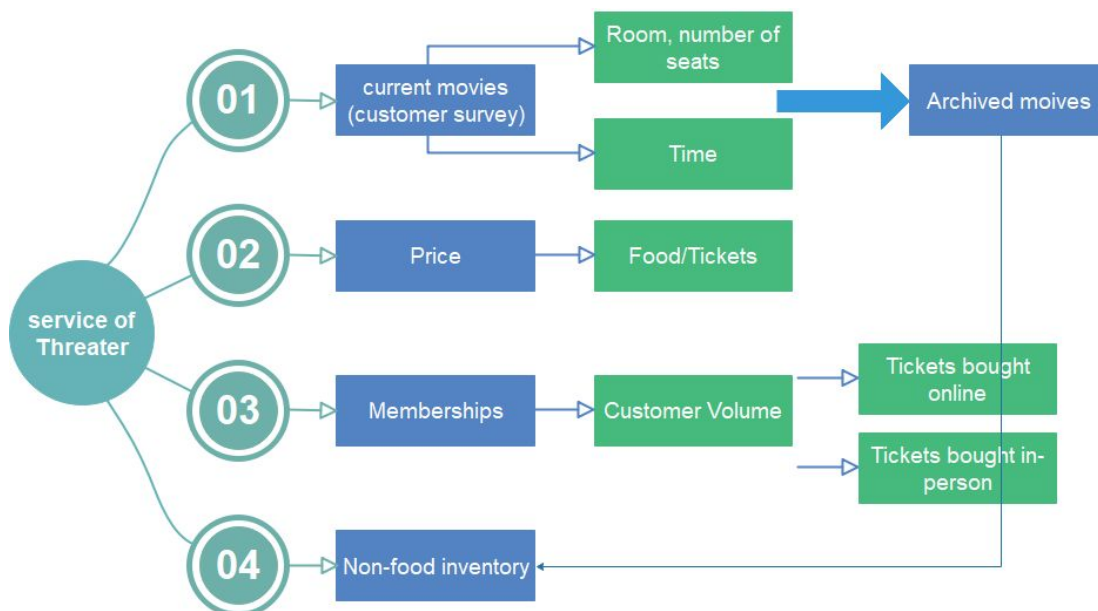- Tickets bought in-person

Figure 2 Part of service of the Theatre

Social Aspect

The social aspect will include online customer survey information and advertisements/promotions. The theatres will use the survey information to show more popular movies and better the customer experience.

Entity-Relationship Diagram in UML

Staff

Manages

Branch

-Staff-#
-salary
-hour rate

has

-Branch-#
-location
-name

reviews

purchase

purchase

Movie Catalog

-current movies
-Archived movies

Concession

-food
-drinks
-price

Inventory

-lights
- projectors
-speakers

purchase

has

Customer

-online ticket purchase
-in-person ticket purchase
--survey

purchase

Ticket

-price
-show date
-seat number
-Show name

has

Show

-start time
-show name
-end time

has

has

reviews

subscribe

purchase

Survey

-movie rating
-quality of comfort
-cleanliness
-sound quality
-extra thoughts

Membership

-name
-phone #
-email
-dob

Movie

-name
- genre
-rating
-date release

Special Screening

-name
-type