Franchise and retail management system

M. Rajeev Kumar, N. K. Senthil Kumar, D. Balaji

Abstract

The main concept of franchise and retail management system is to make a very user friendly environment for all the retailers and franchisees. The software will provide real-time communication between franchisees or the controlling office over the Internet. This online system will be used both at the controlling office and the franchisee centers. It will cover registration, login and order facility for franchisees etc. and store those details at the head office's centralized database. Its main application is to maintain franchisee details such as business partner details, agreement validity, meetings to be organized etc. and to integrate a number of franchisees irrespective of geographical boundaries to facilitate easy monitoring and reporting to the main office.

Keywords: Centralized Data Management System; Ease of Data Access; Monitoring and Reporting; Supply Chain.

1. Introduction

In recent years, retail management issues have drawn more and more public attention worldwide. For eg, through effective management and innovation, Walmart was able to transform itself from a small niche retailer to the largest and most profitable retailer in the world today [1]. So we have to give more concern on management issues in this modern world. Because innovative business ideas are developed after properly studying about all the previous systems with their respective management strategies. Strong management is important in each element of the Innovation System. The management function includes goal setting, organization building, resource allocation, and monitoring of results [1]. Improvements have been made in areas such as supply chain management, inventory management, customer experience, and loss prevention [2]. All the defined factors are affecting the management system a lot, so we have to take in mind every aspect while going to build a fully working management system with a higher scale of performance. There are a number of regulations involved in the management systems. However, the regulations have not involved the implementation details of a tracking and tracing system. According to [3], a large amount of traceability systems are still paper-based and not adequately equipped for timely and accurate tracing of products. Furthermore, the diversity of the systems also makes the integration difficult.

2. Ease of data access

The performance of a management system mainly depends on the easy way of accessing data from anywhere in the environment. Here the easy data access represents the minimum amount effort to be implemented to mine any kind of data from the database or warehouse in a secured manner. A very famous line is quoted like “Much of the data described is difficult for us to obtain, and at the same time we do not have the capacity to try to find it” [4], so we have to give more concern on easy data access and retrieval for a faster communication process.

Ease of data access in the sense the management system should be very effective and well developed to provide the retailers an easy and fast way to gather their things based on some requirement criteria from the Main office who is distributing the products. Different kinds of algorithms can be used for a better data retrieval or we can say as for better searching mechanism which will search the database and provide the output result to the client in a minimum amount of time with a lesser amount of effort. e.g., Sequential Search, Binary Search etc.

In some of the cases, Sequential Search is effective when it comes to a matter of time or in some of the cases Binary Search is effective where an array of data is available. In a way, we can say that a franchise and retail management system should have to build up a platform for very effective and fast data retrieval based on certain criterion which should be decided to prior to data mining.

*Corresponding author E-mail: smrajeekumar@gmail.com
3. Monitoring and reporting

In modern day world all things are not possible to collect from a single place itself so for that purpose we have to go for outsourcing. Outsourcing is only possible when it is done in an organized and managed way by proper monitoring and collecting reports from all the branches which are geographically apart. For better management we can divide the branches according to region wise which will help the management system to do its work perfectly without any kind of problem or difficulty. The main system we can use for proper management is using GPS (Global Positioning Service) and a database which is well defined and updating is done on a regular interval. The concept of tracking and monitoring using GPS technologies is far from novel [5]. Numerous studies and experiments have investigated the potential of GPS to record a person’s movements [6,7]. However, in this case we are going to use the GPS for getting the locations for all the franchisees and retailer which are present geographically apart. It is very much important for all the branches to be in contact with the main office and reports must be sent by the branches regarding whatever things they have sold out or the activities they have done in a daily basis. This will help the main office to understand the needs of each branch or retail store so that they may build up a very powerful management environment for faster product delivery.

4. Supply chain

Supply chain consists of various components/identities like supplier, manufacturer, distributors etc. With the increasing importance of computer based communication technologies, communication networks are becoming crucial in supply chain management. Given the objectives of the supply chain: to have the right products in the right quantities, at the right place, at the right moment and at minimal cost, supply chain management is situated at the intersection of different professional sectors [8]. The supply chain is the major part of franchise and retail management system. Cause everyone will be able to get the services offered by the Main Office after it has been properly distributed among all the franchisees and retailers.

![Systematic Process Involved in Supply Chain Management](image)

Fig. 2: Systematic Process Involved in Supply Chain Management.

The above figure explains the step by step process involved in supply chain management starting from the raw materials to product development and finally to distribute it among the customers via franchisee and retailers.

5. Centralized data management system

The centralized data management system as the name itself implies a management system which is fully developed basing on a centralized structure. Because it is having a number of advantages which are listed below-

a) Economies of scale
b) Lack of duplication
c) Ease in enforcing standards, security

The franchisee and retail management system is said to be as the centralized management system as everything is managed by the main office only. They will gather the requirements from the entire franchisee and retailers region wise and depending on their needs, service will be provided to them.

Actually, this mechanism works in a very effective manner as a single source of database is present. So submission and retrieval of data becomes easy.

In addition, the main purpose is security aspects. Without security, the whole environment may fail. In addition, for better security we have to get rid of duplicate data, which can be externally inserted if the system is a distributed one, but in centralized we can eliminate this kind of thing.

![Centralized System](image)

Fig. 3: Centralized System.

6. Conclusion

After studying all the things in a proper manner about the whole management system the following conclusions can be deduced from the development of the project:

1) It will improve the efficiency of entire franchise management system.
2) It gives appropriate access to the authorized users depending on their permissions.
3) It overcomes the delay in communication in an effective manner.
4) System security, data security and reliability are the striking features.
5) Future upgrades can be done easily if needed.

References


