Mobile Commerce Application for Location Management in Supply Chain and Customer Relationship

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Abstract

The research article is all about the mobile commerce (Mcommerce) application for location management in supply chain and customer relationship. The important findings are to show the mobile commerce application for the process of selling and buying goods and services through electronic handset gadgets.

Keywords

customer relationship management, location management, Mobile commerce application, supply chain management,

INTRODUCTION

The mobile commerce applications for the management of location in customer relationships and also supply chain are discussed in the research article. The study has shown the impact of the mobile commerce application for location management. Mobile commerce is helpful for location management especially for *tracking supply and storage of raw materials, identifying geographical locations of suppliers and customers, flow of products and services, inventory management* and others.
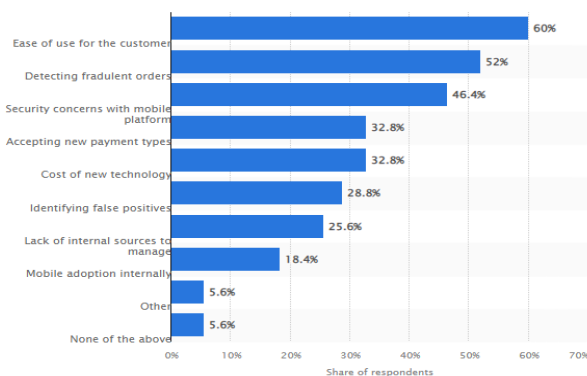
Problem

Figure 1: Challenges of M-commerce faced by customers

The above image shows that the worldwide merchants have faced the challenges of using the mobile commerce application. 60% of the customers have used the application for their comfort and 46.4% of customers have expressed security concerns with usage of mobile platforms.[10] There are different types of issues that customers have been found to be facing such as *technology cost, fraudulent orders, devoid of any internal sources* and others.

AIM AND OBJECTIVES

The aim of the research is to highlight the use of Mcommerce applications in respect of location management to maintain a relation between customers and suppliers. The research objectives will be as follows:

- To understand the concept of mobile management application
- To analyse the mobile commerce application's impact for location management between supply chain and customer relationship management (SCM and CRM)
- To evaluate the problems of mobile commerce application for location management

LITERATURE REVIEW

Concept of mobile management application

Mobile commerce application is the selling and buying of services and goods via wireless electronic gadgets such as *tablets, smartphones* and others. Location management through mobile commerce applications is an important part in the present-day context. [9] stated that mobile commerce applications have provided tracking orders at various locations to sell the company's inventory between suppliers and customers. Now-a-days, the application is predicted to have the highest retail growth of sales and also beat in-store shopping and traditional ecommerce. In society, mobile commerce applications have been used to continue the individual's business transaction anywhere within location management through the internet access on the individual's smartphones and also the easy transaction through some steps.

Impact of mobile commerce application for location management between SCM and CRM

In the present day context, many customers have planned to increase their mobile spending instead of using sales assistance and also window shopping. The users of mobile applications for the management of location have focused on the supply chain and the relationship between customers and buyers. The users have used their mobile phones for their daily needs such as online shopping, continuing their business and others. [3] *mobile commerce applications* have improved the experience of shopping at the time of purchasing, payment and also ordering products through the customer. The time span between supplying and selling has reduced. This type of improvement has allowed the consumers to save money and time. *Location based services* have included the application of mobile commerce to take the form of advertising and coupons directed at the customers based on the present location. The mobile commerce application is used by users who have continued their business through shopping apps such as Amazon Pay or digital wallets such as Android Pay, Apple Pay and others. The users have also gained access to reach the new markets, important purchase data, time and scale their messages.

On the other hand, the application has been used in retail, telecommunication, information technology, finance, sales and services and other sectors. Supply chain includes delivery, storage and selling through cargo, therefore, aircraft, trucks, and other forms of transportation have been included and Mcommerce helps in offering navigation to different locations through software within location management. In respect of maintaining cordial relations with suppliers and customers, Mcommerce has been gaining momentum. [5] opined that mobile commerce has helped to create *a new marketing channel* to sell the individual's own products to the end-users. As Mcommerce offers online purchasing behaviours to customers therefore suppliers are able to track the location of customers and make delivery through cargo accordingly. Gaining more customers indicates gaining more sales with usage of Mcommerce thus, organisational profitability and organisational revenue can be improved geographically.

Mobile commerce application's problem for location management

Now-a-days, mobile and even electronic gadgets technology have improved the way the individual lives. The application of mobile commerce has played an interesting role to notice what and how will be the new facilitating stuff in the coming days. [6] stated that mobile application is a useful application but it has faced many problems in managing the supply chain and customer relationship. The problems of mobile commerce applications are summarised below:

Absence of services: In the rural areas, there is a big problem of mobile phone availability and also the internet connection [7]. In these areas, many individuals are not aware of the facilities so the application of mobile commerce is now unknown to the people.

Habit of individual: People in rural areas do not want to break out of the old tradition so people have refused to enter modern technology.

Issues for connection: Some areas have faced poor internet connection and have faced many problems and also get disturb in mobile commerce [1]. The main problem for not using the mobile commerce application is the issue of internet connection.

Security and fraud risk: In the present-day context, the big issue is fraud risks in the use of mobile applications for purchasing and selling any goods and services. The marketers have not prepared to handle the situation [11]. On the other hand, another issue is the security problem and for this reason, many individuals in rural and urban areas have feared losing their personal and important information.

MATERIALS AND METHOD

Mobile commerce applications have helped to improve the selling and buying of goods and services in the business organization. Along with that, this research has selected a specific previous research study to identify appropriate methodological techniques to discuss the importance of mobile commerce to operate supply chain and customer relationships. The select journal article "*Examining consumer attitudes towards retailer's' m-commerce mobile applications – An initial adoption vs. continuous use perspective*" has included an online questionnaire to collect the data from the consumers [8]. This research study has collected data for two time periods. Time1 collected data from the people who agreed to contact in 11 months. On the other hand, a Time2 questionnaire has surveyed those who do not agree to contact in 11 months. In the first part, this research study has gathered data from 689 people and in the second part from 474 respondents. This research study has adopted statistical analysis to understand the effectiveness of mobile commerce applications for location management in business performance. According to statistical analysis, consumers have positive attitudes towards mobile commerce applications to buy goods and products. Along with that, methodological discussion this research study has selected analysis from secondary data sources that help to represent the role of mobile commerce in supply chain management.

RESULT AND DISCUSSION

Role of mobile commerce application in location management

In the present time, mobile commerce has provided locational and geographical information to the business organization that helps to operate good relationships with the consumers. In business performance, consumers play the most important role to improve business performance. Along with that, the mobile commerce application has provided facilities for buying and selling goods. In recent days, the

most popular mobile applications are *SAP Hybris, Kony, Points, Oracle Commerce platform, DYNAMO,* and others [4]. This mobile commerce application has provided all information about the products to the consumers that help to increase the satisfaction of the customers in the business

performance. The mobile commerce app has provided *location based service (LBS)* to the customers that provided *location based advertising* and *tracking facility* to the business organization that help to manage location to operate the business in the marketplace.

Frequency of Mobile App Use	Time 1 (n)	%	Time 2 (n)	%
Multiple times daily	32	7	59	12
Once daily	99	21	121	26
Multiple times weekly	150	32	195	41
Once weekly	181	38	76	16
At least once a month	12	2	23	5

Figure 1: Frequency of mobile app use
(Source: McLean *et al.* 2020)

According to the previous research study, the frequency of mobile commerce applications used has helped customer's satisfaction. In this regard, the above mentioned figure has helped to understand that most of the people have used mobile commerce applications multiple times in a week as 31% and 41% and the lowest people have used mobile applications at least once in a month as 2% and 5% [8]. That has represented mobile commerce applications that have increased business efficiency in the marketplace.

Evolution of mobile commerce application in supply chain management and customer relationship

Mobile application is a wireless technology that helps consumers easily buy goods from business organizations. Along with that, in recent times, business organizations have used mobile commerce applications for the supply chain

management. According to the present data, *61% in the UK, 71% in the US, and 55% of Indian* consumers have used mobile commerce applications to buy the products [12]. Along with the mobile commerce app business organizations have provided shipping and tracking details to the consumers that help to maintain good relationships with the consumers. In the past, business organizations have faced high costs to maintain supply chains. In this regard, mobile commerce applications have *reduced the cost of supply chain management*. On the other hand, in the present time, business organizations have faced high market competition. Along with that, mobile applications have helped to *reduce market competition* in business organizations.

Main Purpose of M-Commerce App Use	Time 1 (n)	%	Time 2 (n)	%
Browsing	177	37	159	34
Information Search	91	19	33	7
Order Management	32	7	24	5
Keeping up to date on offers	137	29	201	42
Purchasing products	37	8	57	12

Figure 2: Main purpose of usage of M-commerce App
(Source: McLean *et al.* 2020)

In the present time, the main purposes of using mobile applications are browsing, information search, and order management, keeping up to date on offers, and purchasing products. These purposes have provided profit to the business organizations. In this regard, 7% and 5% of people have used mobile apps for order management that help to improve the supply chain management of the business organization. On the other hand, 37% and 12% of people have used these techniques for purchasing products that increase the profit of the business organization [8]. Along with that, mobile commerce apps have provided financial benefits to the organization through supply chain management and customer relationships.

Analysis effectiveness of mobile commerce application to improve business performance

In business performance, technological usage has improved business performance and efficiency. In the present time, most business organizations have used technologies to increase effectiveness. Along with that, mobile commerce apps have helped the business organization to understand location based customers' choices [2]. In this regard, business organizations can serve products and services based on the locational factors that help to increase the profit of the business organizations.

Where App is Mostly Used	Time 1 (n)	%	Time 2 (n)	%
At Home	177	37	182	38
On Transport (on the go)	261	55	264	56
At Work	36	8	28	6

Figure 3: Location of mobile app usage
(Source: McLean *et al.* 2020)

According to that, previous research study has helped to understand where e-commerce mobile apps are used mostly. Along with that, mobile apps are used at home by 37% and 38% represent most of the people who have used mobile-commerce applications from home. This approach has helped to understand the local factor of the customers and manage the supply chain effectively. On the other hand, 55% and 56% of people have used this application on transport [8]. In this regard, mobile applications are mostly used at home transport that helps the business organization to deliver the product on time to establish an effective relationship with the customers.

CONCLUSION

After all these discussions it can be concluded that mobile commerce applications have helped to improve business performance through location management of the organization. In the business organization, mobile applications have provided tracking details to the customers that help to increase consumer's satisfaction. Moreover, mobile applications have provided location information to the business organization that helps to deliver the products to the consumers. Along with that, the business organization has increased profit and established effective relationships with the consumers.

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