



REVIEW ARTICLE

FEASIBILITY STUDY OF THE ESTABLISHMENT OF THE SYSTEM OF ELECTRONIC SALE OF SUPERMARKET PRODUCTS

Seyed Mohammad Mousavi Shahroudi

Faculty member of the Industrial University of Shahroud

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*Corresponding author:

mosavi.shams@gmail.com

ABSTRACT

The main purpose of this study is to determine whether, with regard to the specific situation of Iran concerning the technical, financial, regulatory, cultural condition and alike, the electronic sales is possible or not; and whether it is practical to design and implement this system, considering all conditions in the country. The purpose of this study is to estimate the success or failure of the implementation of this system; hence the basic indices of such estimation include:

- a) Its reception from the part of people;
- b) Technical issues;
- c) Costs;
- d) Executive package;
- e) The preference of this system over the presently applied systems.

The main assumption of this study is that the establishment of such systems would be needed sooner or later, and since these modern types of purchase of goods and services would be developed, the feasibility of this system has to be studied.

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INTRODUCTION

The supermarket foodstuffs include the main item in the shopping basket of most Iranian families both in size and price. Meanwhile, the supply and distribution of this necessity has its own issues such as the trafficking expenses, the expenses of the time spent, occupation of the urban useful spaces for the establishment of the shops and stores, environmental pollution, the impossibility of a comprehensive monitoring over the quality of the products, lack of the communication of the exact needs of the consumers to the marketers, and the untrue prices due to the presence of the dealers.

Each of these issues, in turn, results in several other problems. That is why the more developed countries look for new solutions for these problems. The increase of chain stores, credit payment systems, the systems of good deliveries at the place, standardization of the quality of the manufactured products, and finally (with regard to the great improvements in the information technology and computer) the development of the electronic sale systems based on the methods of the electronic transaction of the data, not only provides the opportunity to obviate most of the above-mentioned problems but also to enjoy the advantages such as the acceleration of the

fulfillment of the public needs, shortening the route from the order to delivery, being careful about the selection of the really needed goods, familiarity with the properties of the chosen product, confidence in the real quality and price of the product, avoiding the useless haggling system, observance of the higher packaging and transition standards, collection of the various statistical data about the consumption trolley of the family and many other cases. Iran or any other developing countries, for the necessity of the movement at the course of transition of the traditional trade system, have to take steps on the route of application of new ways of purchase. This study aims to analyze some of the aspects of this course of action.

Electronic Sale of the Supermarket Products

It has not been long since the online supermarkets have been launched. Due to this fact, it is necessary for the supermarkets to stabilize their position, and to compete in a profitable way. But how is it possible for the online supermarkets to safeguard themselves in the present competitive situation of the market?¹ The perspective we now have about the online supermarket has been considerably changed compared to that of several years ago. Some statements indicate that the consumers' reception and shopping from these supermarkets, which was once introduced as the remedy for any kinds of troubles, has declined so that some believe that these supermarkets would be totally melt away. While the market of online supermarkets had a 200 percent growth during the years 1999 and 2000, the outcome of their improvement was that many of them failed to attract sincere customers. Moreover, the slow economic growth resulted that the first predictions about the \$18 billion sale of these supermarkets by 2005 did not come true. Recently, these predictions have been more rational so that the studies of Forstead and Jupitiomedia Matrix have declared a sale of about \$7 billion by 2005. This can be known as the result of the troubles in the online supermarkets.

Two main changes happened last year. First, all major players in this domain became conservative

and paired with the regular and offline supermarkets. (Today, the supermarkets know multi-aspect sale channels which are separately divided based on their application, market profits, and under the online suggestion.) Second, many supermarkets changed their policies to respond the issues such as high costs and the low level of orders by the customers, so that many online supermarkets left out their Warehouse-Based model and acted based on the Store-Pick model. And finally, the web-based supermarkets in the main markets started to economize themselves to focus on the profit-making and responding to the investors' demands for reaching a positive profit and liquidity.

In this study of the strategic electronic structure, we have to consider the following issues:

- Despite the numerous mistakes of the designers and managers of the idea of the online supermarkets, their rivals continue to progress;
- The selection of the working model of an online supermarket should be mainly relied on the real size of orders and the predictions which are really offered to a shop/store.
- Even if an online supermarket has a low level of improvement and progress, it should profitably act in a market or major store within 4 to 5 years based on the information available about the particulars of the customers;
- For the online supermarkets to effectively come to a profitable stage, some measures should be taken to overcome the barriers they face;

Today, online supermarkets have perceived that they should have a clear understanding of the market conditions as well as the appropriate working and the functioning context to avoid the mistakes, and they have realized that only through an accurate evaluation of the profitable variables they would be able to choose the best route forward.

E-Market Players

All first class chain supermarkets have examined themselves in an online channel. On the other

¹ Online Shops Market Research ,Sean O'Neill ,Julian Chu ;July 2001 , Http : // WWW . i bm . com

hand, some of the greatest players have slowly moved themselves on this direction. These online activities widespread all over have also made the others to be guided as a result so that this process has led to an attempt for a leap towards the starting point of the e-supermarket business and maintaining it at a wide geographical area. The local and regional players have also started to enter the market by themselves or through their partners. For example, some small supermarkets have joined the online channel and attempt to take part in the same market where the great and national supermarkets have participated. Compared to the conditions of a few years ago, just a few numbers of great players have been remained in the market and so the local players preferably struggle more to have a share in the market. The traditional supermarkets look at the online channel as an investment for the future and as a way for improving the demand basis of the consumers which is growing now.

Today, the e-supermarkets, either the local players or the international ones, consider the development in an online channel as a way for safeguarding their share in the market. To the extent that the affordability of the consumers in the chain stores and retailers is increasing the supermarkets are also able to offer the required services through any growing procedure. The studies have revealed that the percentage of the weekly shopping of the customers from the supermarkets with a multilateral communicative channel is about 14 percents higher than the supermarkets with only one offline channel.

The Market Expansion of the E-Supermarket

Many online supermarkets have developed their activities in multilateral markets with profit-making as their first incentive. However, these supermarkets could not obtain a sufficient volume of orders even in one single market. So, the results indicate that for the supermarkets to come to a profitable level, they have to penetrate into those markets which are profitable for them. If they can make profits in one certain market, then they would be able to begin to develop and expand their simultaneous activities in another market as well. Currently, many e-supermarkets either have been

closed or have transferred their development plans to weak markets where it seems improbable to make profits. Though there might be major places where it would be possible to have a potential of serving for example 50000 families or more, the e-supermarkets are not generally able to penetrate into such markets. These supermarkets need to make various kinds of marginal profit-making services in their stores in order to be more acceptable and better received. Participation in and service-providing to the personnel of health clubs and daily healthcare centers give more penetration chances to the e-supermarkets.

Effective Factors for Reaching Various Kinds of Markets²:

1. Profitability: profitability is influenced by the competitive environment, market demand, customer characteristics, and potential opportunities.
2. Awareness of the conditions of the environment; to determine whether there is adequate demand in a certain market or is there any chance to gain a share of the market or not.
3. Determination of the requirements and needs of the customers; the evaluation of the customers' needs is important in selecting the products and the type of delivery services. Determination of the market attractions is important for the customers and for the determination of the average level of orders made.
4. Awareness of the accessible budgets is important for launching an online supermarket service in a particular market.
5. Decision-making in the selection of the operative model; it is usually required to assign the operative model after determining a certain market to enter. Assessment of the basic level of available customers and the volume of orders is essential in this particular market in order to be able to determine the optimized model.
6. Making decision on the delivery model; while making decisions about the selection

² The collection of the articles of the first conference on The Future of Internet and E-Business in Iran, March, 2000

of delivery model, several factors have to be assessed. Depreciation charges, and other charges related to asset and the charges related to the couriers are among this set of factors. It is also important to determine how the order volume can affect the delivery issues.

7. Program assessment; assessment of the work progress should be carried out about the continuous activities of these supermarkets. In some cases, a change in the operative model would result in the more gross incomes and in some cases it would cause higher amounts of profit.

8.

Recognition of the popular market	
Determination of the needs of the costumers and its requirements	Determination of other accessible sources
Decision-making about the operative model	
Decision-making about the delivery model	
Assessment of the programs	

Feasibility Study of the E-Supermarkets (Applied case)

The subject of this study is the feasibility study of the development of electronic sale system of the supermarket items in two urban districts of 2 and 5 in Tehran.

●Reasons for selecting two districts of 2 and 5 in Tehran include:

1. The existence of a traditional shopping culture;
2. Much more urban accessibility;
3. Establishment of the chain stores of Shahrvand and Refah.

●Research Questions:

1. Do people welcome this system?
2. Is this system applicable in technical terms?
3. Are the charges of the implementation of such a system justifiable?
4. Are the conditions required for this system to be implemented present in the country?
5. Are the advantages of this system preferable compared to the presently allied systems?

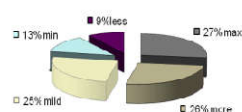
This study is an applied study. The instruments used for data collection in this study include questionnaire and description.

DISCUSSION

With regard to this fact that an equal weight was considered for all raised questions, a collection of responses provided in previous sections are presented in the following diagram. This diagram would be interpreted and the conclusion would be presented in the following section.

The Basic Question of the Study:

Is this system applicable?



27% percent of the respondents chose the most positive choice and 26% percent chose the positive choice, and if we add a half of the middle choice, which equals 12.5%, then we can claim that 65% of the responses have been given to the middle and above. On the other hand, only 22% of the responses indicated a negative or totally negative opinion. With a standard deviation of 1.26, and a range of 0.95 to 5 and an average mean of 3.47 we can infer that the respondents have generally assumed of this system as applicable in all technical, economic, and legal terms.

As far as the electronic and computer-based parts of this system are concerned, there is an increasing interest in and public reception for different kinds of information technology at all levels of society; today, in most cities and towns nearly all citizens have access to internet service-providers in their neighborhood. We should particularly bear in mind that the research has been carried out in Tehran. There are many specialists active in the area of designing and implementing such computer-based systems all around the country who can be

compared to their foreign counterparts. So, there should be no concerns about the planning and implementation process of the softwares of these systems. It is not possible for all to have access to internet with a desired quality; however, the telecommunication and informatics infrastructures are being based on the improvement of such hardwares. This ground has already been prepared in some major areas of the country. The legislative, financial, legal conditions and totally the context for the implementation of such a system, though not completely and clearly, are being improved with a promising perspective. It seems that concerns are being decreased in this regard.

Conclusion

The result of all analyses provided on any given response, and what can be understood from the diagram of the basic research question, explains that the grounds are prepared for implementation of such a system, and there is no significant problem for the implementation of this system with regard to the factors such as the reception of the people, technical issues, cost factors, a legal ground, and finally, the relative advantages. Finally, concerning the preference of this system over the presently applied systems of service and good supply, as it was said and observed before, the advantages and capabilities of these new forms of providing services cannot be ignored. These types of services should also be improved. The improvement of these services makes the other forms of providing goods and services to improve themselves to satisfy their customers and to approach what the client really seek.

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