

A Review of the Effect of Electronic Commerce in SCM and its Challenges

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Abstract: Competitive advantage of an organization to a large extent depends on efficiency of its supply chain. The supply chain management should increase the member's coordination to make opportunities for consensus. In recent years by growing the information technology, electronic commerce have changed supply chain elements. Especially internet which is a fundamental part of electronic commerce owns a high potential to improve supply chain. In recent years supply chain is a growing body consist of instruments and technologies to make coordination and it can improve the key processes such as decreasing the costs, improving the quality, facilitating distribution and affricating consumers satisfaction. The purpose of this study is to investigate the impact of technology in organization. Then the focus will be on the impact of electronic commerce as a modern technology on different parts of supply chain including marketing, purchasing, distribution and logistic despite the copious advantageous of electronic commerce, there are some deficiency is its nature which could lead to obstacles in cooperating of supply chain management. These obstacles include cultural preventive, untrustworthy, poor infrastructures and insufficient use of information technology, although such effects can be decreased by using strategic insight, stable development and good infrastructures.

Keywords: Electronic commerce, SCM, Challenges

INTRODUCTION

One of the particular features of recent decades is organizations concentrating on supply chain in order to gain competitive advantages. On the other side electronic commerce has a high potential in order to make supply chain's purposes possible.

Supply chain management has put the emphasis upon the long term advantages and total benefits for all supply chain members by emphasizing on cooperation and information distribution. This shows the importance of communication and information technology in supply chain management. Information technology has a fundamental impact on improving communication and coordination. In order to improve supply chain management in a new commercial environment. The main information technology elements must be determined; one of these elements is electronic commerce which has improved supply chain ability by using information technology (Asif and Mandviwalla, 2005). The emersion of electronic commerce leads.

To a movement towards cooperation and as the technology make the efficiency of relationship possible, it will speed up electronic trade is not only responsible for supply chain management but also provide a good progress of information and make opportunities for

companies to improve their complete conditions (Angeles, 2005).

Electronic commerce have received different forms including electronic transmission of data, direct connection with suppliers, internet, intranet, extranet, electronic catalogues. But the most influential effect has been caused by internet (Angeles, 2005). Internet has influenced all the organizations aspects from the purchasing phase to selling management. It has caused a global trade field which is working 24 h the day and 7 days of the week. Companies can find their consumers from all over the world. Even small companies because of the generality of internet can find competitive opportunities.

The new markets of global trade have created widespread opportunities. For organizations which are in line with the changes in the operational and competitive fields, accessing the verified information systems is indispensable. Now a day's high quality internet based systems related to supply chain management and organizational resources planning are unreachable (Narsoo *et al.*, 2009).

Commercial uses of internet and their incorporation with internal information system such as extranets and ERP are results of changes in lattice and the other technologies between organizations which allow other companies to use these networks (Narsoo *et al.*, 2009).

The purpose of network providers is to gather a selection of global communication in order to improve computer and systems related to internet and nonhuman actions (Angeles, 2005).

Information systems based on internet make a good opportunity to improve and develop supply chain management. Incorporating supply chain management processes needs distributing the information and internet make it easy? Information's about expectancy and delivery time planning and services regularly follow in order to coordinate. The activities internet leads organizations to share and communicate all their processes including designing the product and supplying the consumer's demands with their commercial shareholder in supply chain in a cheap and fast way. Using internet has caused new methods in purchasing selling and other connecting channels in supply chain (Angeles, 2005).

There are some evidences show that how electronic commerce. Increases consumers information management and efficiency of transaction processing in turn make forecasting the demand possible and make classer connections with suppliers. The effect of electronic trade on the supply can be vivid when this kind of trade accelerate the connection organization and as a result decrease the time cycle and improve cooperation.

For organizations which try to distribute their markets to global stages it yields on opportunity and advocate the incorporation of commercial shareholders. This kind of trade decreases the costs. More over electronic trade increase group working and bounds with costumers in order to ask for their help and receive their feedbacks and it is efficacious in respond to changing markets (Narsoo *et al.*, 2009).

The other advantages of electronic commerce on the supply chain management include increasing data exchange velocity. Decreasing the faults and improving the accuracy of received and sent information's, decreasing the treasures store, providing planning, store controlling, decrease in expectancy time for delivering the products.

Despite the fact that electronic commerce acts successfully in supply chain management but has some problems in nature which include security. Although a cultural shift must occur in order to make a good company ship between buyers and suppliers in which information can be exchanged in a trusted environment. Such a change is necessary in order to make a good soliditary between chain members (Narsoo *et al.*, 2009). Now e-commerce and specially Internet create appropriate relation, cooperation and solidarity between supply members' chain, through information technology. E-commerce is probably the best application of Information Technology (IT); as which in recent years, it has been observed that EC has changed management of supply chain and it has

high potential in industry, retailing and service operations, in other words, IT effectiveness is an efficient pattern in supply chain. Therefore, it is trying to study advantages and disadvantages of e-commerce in this study.

HISTORY AND PROCESSES OF FORMING SUPPLY CHAIN MANAGEMENT

After the second war supply chain was a set of linear and independent processes which connect producers, storekeepers, retailers, whole sellers and consumers.

By the 1960's companies tried hard in order to improve their competitive power. By standardizing and improving internal processes to reach internal solidarity which is generally called logistic management in this period invention of supply chain management including Material Request Planning (MRP) developed. In this case some inadequacies such as lack of responds of suppliers to consumer didn't interfere but cause some problems in immediate and quick compatibility in market changes.

In the 1970's and beginning of 1980's American companies faced a drastic competitiveness of Japenes companies, especially in Automobile industry, Japenes manufacturers used just in time delivery system. This system's purpose was to adjust the amount of supply to small motor manufacturers companies and it aimed to decrease supply level in a effective way (Wagner and Bode, 2007).

Detroit's Big Three Company had to search to find some ways to make connection with suppliers in a effective way this solution was to accept orders in an standard way which was called electronic data interchange.

SCM was invented in Toyota Company for the first time. After outbreak in automobile industry in Japan, evolution in SCM as a independent concept in industrial management theory was introduced (Wagner and Bode, 2007).

By the 1990's widespread in network and internet technology was operated which in turn decreased the costs. In recent years development of information technology and its vast application in SCM, most of the main activities of supply chain management is implementing by using new methods.

Information technology as the main core of supply chain management causes the coordination of activities inside the organization. More over by developing information technology shareholders commercial cooperation is developing SCM. In fact SCM is the evolution result of store keeping management. In the evolutionary path, by emerging new concepts of production, provision and orders, the logistic concept was developed new condition which is supply chain is the result of joining different operational segments. Which

consists providers in one side and consumers in the other side, in the other word SCM concept is the result of evolution's logical continuity in production and operational management.

In practice SCM is a incorporation of special zones in management conceptual area including total quality management business process redesigning and just in time production manner concept and definition of supply chain management (Zimmermann *et al.*, 2006).

Some experts see SCM as an administration process which includes progress, raw materials and productions. It means that they believe supply chain is made of two or more discrete organizations which can be connected via material flows, information and financial flows.

Other experts see SCM as a management philosophy and its implementation. The definition is supply chain management is an allied philosophy in order to manage distribution path flow from suppliers to final user and as philosophical management includes extent and limit of allied behaviors in order to make cooperation between consumer and supplier in the external confederation flow (Zimmermann *et al.*, 2006).

As a management process set, SCM is a process of management relationship, information and material flows inside the defended boundaries in order to dispatch the service and economical value to consumer by using physical canals management and related information from the resources for consumers (Wagner and Bode, 2007).

SCM is defined as a systematic process. In other word, the strategic coordination traditional commercial elements with a specific company and on overall trade inside supply chain in order to improve each companies long term administration and taking supply chain as a whole. Other simple definitions for supply chain include all the activities related to product creation flow from raw materials to delivering the product to the final user and also the related information flows and supply chain management is defined as a contraction of main commercial processes from the final user to main supplier who enhance products, services and information and credit consumers an shareholders (Wagner and Bode, 2007).

By completing supply chain management, the relationship between supplier's consumers etc., and strategic links in long term coordinate bonds will be increased. The last definition of SCM includes multi activity companies, multi commercial activities and coordination of these activities between commercial shareholders in supply chain. More than 90% of North American manufactures believe supply chain management in substantial for company's success (Steven and Krüger, 2004).

Purpose:

- Decreasing the costs by matching demand and supply.
- Decreasing the total manufacturing costs by progressing productions flow by using producing processes and improving information flows between commercial shareholders.
- Improving consumer satisfaction by using service supply, quick dispatching and more plasticity in cooperating with distribution (Steven and Krüger, 2004).

Functions:

- **Demand planning:** demand planning determines the extent of the production which must be manufactured, by searching data in economic institute's data bases.
- **Supply planning:** supply planning includes investigating the needs and making sure about the store's adequacy in appropriate levels.
- **Production time planning:** It regards to real resources and provides a production time planning according to real world boundaries.
- **Transportation planning:** It determines the best and the most advent ago us way to storing and loading (Götze and Mikus, 2007).

In today markets competitions are based on production time and quality and the in time production delivery to consumer or in the other word is attracting the consumer satisfaction, therefore the coordination between suppliers and distributions and the other members of supply chain is very important. This coordination is become as a network in which global suppliers are following the raw material effective flow in output manufacturing process. The most difficult part of effective supply chain is information and relationships management, which intern has a wondrous effect on the performance level of other chain parts (Christopher and Peck, 2009).

Information valid transmission cause the process operates more effective and operative. Coordinated and appropriate information management among the shareholders has an increasing effect on accuracy, quality and speedy.

Electronic trade makes it possible by company communication electronic system designing with shareholder. A manager says "by daily developing technology in every commercial framework organizations need to make adjustment between new electronic trade and supply chain technology in order to keep market contribution.

Rapid growing of technologies has changed the market and is the main reason to use supply chain. Supply chain management needs strategic links effective management and data authority and general information in order to make information exchange possible. Information technology provides accurate an update information transmission according to needs and demands in supply chain (Christopher and Peck, 2009).

Making the chain harmonious by using communication and information technology has copious competitive and economic advantageous.

SCM is the same as making the information in an organization common.

NEW TECHNOLOGIES ADJUSTMENT TO SUPPLY CHAIN MANAGEMENT

Aggregating the supply chain activities accompanied with its implementation is the competitive necessity in majority of industries. Nowadays commercial organizations are faced to a more competitive environment and this is because the developing countries are emerging in global markets. Intern companies are affected by companies which can introduce their new products and services in a fast and cheaper way. The majority of industries and companies enter a ultra competitive marketing which is characterized as complex, no certain and more competitive (Sibel, 2009).

Innovation is defined as service, product, plan, system, instrument adoption. This is used to organize a new issue. Gaonkar and Viswanadham (2007) emphasizes, the most vital strategy to create and maintain competitive advantageous is one of the permanent innovations. In the past, commercial organizations emphasized on decreasing the costs in order to gain competitive advantageous, but today companies must do the necessary to be innovative. One side of the innovation which is discussed here is related to information technology adoption. American administration manager dedicate to percent of new instrument investment to technology. Supply chain management is a good basis for innovation and information technology investment (Götze and Mikus, 2007).

Effective environmental and organizational elements on supply chain adoption are introduced:

- **Organizational factors:** Most of the organizational factors are effective in technology adoption and innovation. The company size is one of these variables. It have been discussed that larger organizations own financial resources in order to invest in new technologies and dedicate large capacity to accomplish new technology. Some

suggest smaller organizations due to their small size placidly are more innovative any way large bodies of research have shown there is a positive relationship between organization size and new technology adoption (Steven and Krüger, 2004).

Organization structure is another important factor in technology adoption. Previous researches have shown an obscure result about this relationship. Steven and Krüger (2004).accounted focusing as the agent to decrease the contrast between organizational units and encouraging innovation adoption. In order to advocate this concept Angeles (2005) found that focusing organizations adopt new technologies explained a negative relationship between focusing and adoption.

There for it is expected to see more technology adjustment of supply chain in non focusing organization.

Past performance is the other organizational element which is effective in flexibility and tendency to strategies regulating and competitive principle in order to fit into adoption or innovation in respond to environmental changes. Previous researches suggest the past successful performance cause resistance to strategic changes. Angeles (2005) explained that companies with a good performance in previous years ventured to strategic changes in their 2 years performance. The above description emphasizes that organizations just use the performances that have been successful.

The link between supply chain logistic strategy and company strategy is vital for its success. Asif and Mandviwalla (2005). emphasized upon the supply chain strategy integration and company strategy in order to keep company successful. Compleitive increasing recognition from the supply chain integration to company strategy must result in information technology adoption. Other scientists found that the strategic plan is inline with technology adoption. Therefore companies integrating supply chain management with company strategy adapt most of supply chain management and yield appropriate information systems.

- **Environmental factors:** Numerous researches in innovation field have investigated a spectrum of environmental factors such as economic situations, global competetivment, transaction conditions, focusing on industry an uncertainty of environment based on new technologies. We focus on two key variables including inter organizational factors and environmental uncertainty (Asif and Mandviwalla, 2005).

- **Inter organizational factors:** A wide range of researches emphasis on the effect of commercial shareholders on technology adoption with EDI. The tension of shareholder-make the supply chain to start data format standardizing development and coordination and correlation between organizations for example industrial correlations in automobile industry have put emphasis upon EDI standards creation and organizational links about the adoption of these two effort to intensity the relationships and production development (Steven and Krüger, 2004).

Steven and Krüger (2004) reported that more than 70% of respondents claimed that the consumer wishes have a clear impact on company decision to EDI adoption. There for it can be stated that correlated organization with more pressure from the supply chain share holders incline more to technology adoption in supply chain the social exchange theory emphasis that inter organizational correlations and social factors has a silent impact on company activities and studies (Wagner and Bode, 2007).

An transaction ideal condition between the opponents leads to a good decision and coordination development. The reliability and trustworthy between companies are the transaction key factors and are important in supply chain technology adoption and this is because the transaction automatization need transaction crudity (Zimmermann *et al.*, 2006).

Steven and Krüger (2004) by examining the insurance industry showed inter organizational information system investment has a positive correlation with transaction condition. So it can be stated trustworthy and desirable condition of transaction could lead to supply chain technology adoption.

The impact of electronic commerce on supply chain management nowadays electronic commerce and especially internet has created an desirable correlation and coordination between supply chain members via information technology, decreasing the costs and time (Iacovou *et al.*, 1995).

In such a way that previous supply chain successful patterns become outdated and ineffective, therefore management has evaluated them too. Electronic commerce in substantial way reconstruct traditional supply chain in several industries and d-precisely decrease buyers and sellers integrating costs and more over provide clear relationship among supply chain members electronic commerce is a type of inter organizational information system in order to straightforward commercial zones communication (Hussin *et al.*, 2002).

Electronic commerce most probably is expected to be the most effective kind of information technology. In recent years it have been observed, EC have changed supply chain management and owns a high potential in

industry, retail and service operation. Electronic commerce rehabilitation is an effective pattern in supply chain management. Information technologies have caused global economic growth. In network economy, commercial utilizations and management should help internet in order to keep electronic commerce era permanent. Information technology plays a vital role in supply chain member's interorganizational network management (Hussin *et al.*, 2002). Electronic communications in supply chain have substantially changed organizational relationships nature (Hussin *et al.*, 2002).

Through electronic networks, as a result of integrating by tight connection processes in supply interphase relationships, companies will be able to gain (Ismail, 2007).

Network technologies permit the companies to cooperate with commercial shareholders in order to increase the interest and decrease the costs and a lead to more consumer satisfaction in competitions network technology has the power to uphold the supply chain's whole activities. From all supply chain main activities, information management has a key role in solidarity between chain members. On the other part the new progresses in the electronic commerce field cause business use the recent technology progresses such as internet in these fields. Supply chain management complexity (Ismail, 2007).

Makes the company to move towards online communication systems like internet. Internet changes company's commerce systems. These permanent changes are converting industrial economy into network economy (Hussin *et al.*, 2002). Internet based electronic communication make increased information division possible among inter organizational network members in lower levels. By developing internet based technologies, cooperation and coordination between electronic commerce and unitary supply chain management systems in substantial. Those supply chain benefiting of internet facilities present new methods to take advantages of competition (Wagner and Bode, 2007).

Internet intensified converging power is regarded from two aspects:

- Inexpensive correspondence which let mid-companies take advantages of SCM techniques.
- Transmitting speedy networks into commerce leads to soliditary transactions and communications in actual time.

Internet open standards make sure that large organizations can easily by increasing business operation efficacy, develop their commercial social. More over

small companies which in recent decade have found communication technology complex and expensive can choose the appropriate communication according to their business and enjoy the EC and internet revolution, besides organizations which are being recently familiar with EC can recognize the open standards have been made by internet technologies, easy in implementation quick in learning and effective in utilization (Ismail, 2007; Narsou *et al.*, 2009)

Electronic commerce experts have come to a settlement about internet impact but the most explicit impact is power transmission from the seller to buyer. The seller has more opportunity to search. Internet makes the company's information internal and external distribution possible and allows companies to improve their consumer's management, although. Electronic commerce not only is profitable for consumers, but also some benefit can exist for supply chain (Ismail, 2007).

Internet-based EC makes companies capable in the following fields:

- Decreasing purchase cycles as a reason of using catalogues and online ordering and payment.
- Store keeping cost obviolation as a result of competitive auction.
- Decreasing developing cycles and accelerating the time a new product enter the market because of the synchronic engineering of products and designing process.
- Accessing global large markets interest by defeating traditional costs.
- Making sure those products, market information and cost are always updated.
- The meaningful increase of information speed especially international communication.

More over it directly the communication costs. Communication acceleration can decrease purchase related costs. Internet not only creates welfare and communication and transmissions flexibility but also brings the competitors to commercial fields and makes the commercial guideline in global village easier.

Internet provide an easy way to transmit the information about the company and its products from both inside and outside and in a supply chain coordinate commercial shareholders in order to gain more benefits. Internet encourages a closer relationship between consumer and suppliers (Ismail, 2007).

Electronic Data Interchange (EDI) can help in minimizing to store keeping costs. EDI allow keeping the minimum supply with consequent deposit in store keeping, insurance, security costs. The main advantageous of this technology revealed when EDI was integrated in company's EC system companies implemented EDI

successfully have reported the general advantages of purchase processes acceleration, transaction cycle time reduction, returning extra product, faster responding time and as a whole improving the services (Hussin *et al.*, 2002).

The important point is that due to complexity and implementation's high costs. EDI tends to be used by large companies such problems used to be exist accompany with EDI's implementation in several industries. Despite the fact that EDI has a substantial role in SCM progress but it has not yet growth by a high speed. EDI's inter organizational standards in constructing documents makes it's following hard and despite the superficial benefit it doesn't worth to try. Now EDI have changed it's direction towards internet in order to expand its accessing such approaches allow the large companies to establish electronic-based relationships with suppliers according to their abilities and capabilities (Hussin *et al.*, 2002; Ismail, 2007).

Electronic commerce obstacles for cooperation with supply chain management so far the evidence may show, EC have been applied successfully and globally for consumers and suppliers, but there are some obstacles in order to implement EC in supply chain. Successful implementation of electronic commerce needs the common contribution of supply chain members. However each of supply chain members may have some problems in compatibility with the new habits and forming cooperation and trustworthy (Götze and Mikus, 2007).

McIrror presents some evidence that suppliers have found it difficult.

In supplier part there may be a reluctance to share information about costs and prices. This is because the consumer may use such information to remove interest margin or reveal competitors prices. In most cases information cost don't be utilized to bring reciprocal interest, in consumer part, in a retailing environment, the retailer may not dement to reveal the information's about selling to supplier, because he thinks the supplier may reveal such information's to competitors.

There are also cultural and technical issues concerning SCM web-based implementation.

Technical issues: Technical issues concerning supply chain management is tributary. The most important anxiety in this field is the use cure nature of internet. The open accessing in internet has caused websites to be vulnerable towards invasion. There for data security is a prevalent issue in SCM's web-based implementation.

Also there has been a historical information system deficiency in organizations. Inside the organizations usually functions or different units have adverse purposes and systems. From the outside supply chains are not in a complete harmony with suppliers and consumers.

Shareholders often have different infrastructures in money, language, cultural barriers (Götze and Mikus, 2007; Ismail, 2007).

Cultural issues: An solidarity contribution in supply chain management is based on trustworthy, reliability, cooperation, compatibility, manager's perceptions of environmental uncertainty and non extentioning nature of bonds.

Its clear that if electronic commerce leads to supply chain members solidarity integration, there would be a need to create an intrinsic cooperation by which the information could be interchanged in a reliable environment. Because institutions have a natural resistance to reveal their professional secrets to their shareholders.

Therefore solidarity in the whole supply chain is another technical issue in order to implement web-based supply chain management. Effective electronic commerce implementation in order to patronage supplying links and supply chain optimizing needs that electronic commerce in business and consumer and supplier's technology infrastructure integrate completely to each others. Processes redesigning should not only include inter organizational processes lout also must be consist of extended business networks.

Researches have investigated some SCM's developing barriers as follow: coordination and solidarity deficiency between information technology and commercial pattern, lack of appropriate strategic planning poor infrastructure for information technology. Insufficient utilization of information technology in institutes and also lack of sufficient and suitable knowledge for executing information technology in SCM.

SCM development: The business environment changes rapidly, therefore SCM focus must be based on this changing. Changes in allied strategies increase their needs to costumers. An large extent of supplied products and services by suppliers makes SCM increasingly complicated. In this situation the cooperation links between commercial shareholders in supply chain becomes vital.

SCM must effectively respond this challenge. In order to increase competitive advantages by using effective SCM a large number of companies tend to invest in more advantageous industries. Today an effective SCM plan is face to main challenges:

- Web-based integrated applications of SCM with company surplus application which are based on central processor or server systems of processor basis.
- Communication systems with their supply chain shareholder in order to make solidarity supply chain possible.

- Converting a traditional business performance into a new powerful system by using SCM is not an easy study.

THE SUPPLY CHAIN ACCESSING STAGES

SCM needs to be implemented in a conscious approach during early stages, an implemented stage provide this opportunity to identify system errors early and be corrected before moving to the next phase in order to create a operative SCM system a company needs (Angeles, 2005; Christopher and Peck, 2009).

To follow these stages:

Stage 1: Creating a perspective: This stage need completing the following functions:

- Defining how far the supply chain extent from consumers to suppliers.
- Identifying potential issues along supply chain.
- Deciding how SCM operates to distinguish solidarity integration among the share holder.
- Defining information flows systems, request exchange and data interchange.

Stage 2: Creating obligation: This stage includes the following important functions:

- Establishing organizational preference.
- Searching major executive manager providers and employees commitment.
- Yielding sponsorship from suppliers' dispensers and consumers.

Stage 3: Preparation: This stage includes the following important functions:

- Indoctrinating people to gain more knowledge about information technology.
- Preparing business rest applications in order to solidate SCM.
- Creating implementation groups along with professional advisers, if necessary.

Stage 4: Choosing SCM seller: This stage consists of the following functions:

- Assessing and deciding about seller for SCM particular solutions.
- Choosing a suitable SCM seller according to company needs.

Stage 5: Formalizing SCM applications: This stage consists of the following functions:

- Implementing experimental plans.
- Working with suppliers, dispensers and consumers in order to further engineering of task processes.

- Working with software sellers and advisers in order to teach all employees, those who access SCM applications.
- Solidating SCM new application with company's rest a usage.

Stage 6: Assessment and permanent improvement: the last stage include 5 the following important functions:

- Working precisely with software seller in order to purify system in a particular condition.
- Improving SCM's applications based on results acquired with business shareholders.

CONCLUSION

Electroning commerce emerging and arriving at global markets helps manager to overcome the fundamental challenges in supply chain management by using maximum efficacy and flexibility which is the main purposes of supply chain (Ismail, 2007). EC as a perfect theory is presented to introduce new approaches in supply chain management.

Internet has enabled managers to maneuver more in SCM. The abilities to make cooperation and solidity among consumer and suppliers in commercial activities have caused competitive advantageous for companies suppliers could intensity their consumers business, by implementing such innovation in electronic commerce such changes make suppliers able to move from a passive role to as a strategic resource for company (Christopher and Peck, 2009).

EC in supply chain has changed from a profitable instrument into a commercial strategy. Electronic commerce is not just an instrument besides others but is a new perspectives (Ismail, 2007).

EC must be considered as a strategic entity. Developing effective strategies in order to implement competitive advantageous through EC to success in 21st century is a necessity (Hussin *et al.*, 2002).

EC presents optimized advantages of SCM to other organizations according to their size and financial resources by stab establishing a global network.

EC has some barriers despite its numerous advantages including cultural and technical barriers. In order to overcome cultural obstacles such as insecurity untrustworthy and lack of tendency to share the information, a cultural shift is vital in order to benefit this kind of commerce's advantages. In order to overcome the technical barriers including lack of compatibility and solidity among organization purposes from both inside and outside, EC need a planning infrastructure (Sibel, 2009). A maldesigned system studies ineffectively in any condition and creates security problems. Infrastructure must be designed accompanied with sufficient flexibility to allow changes compatibility (Sibel, 2009). Therefore an

appropriate infrastructure is vital for EC effective application. A good planning infrastructure can suggest that on EC's future progress will troubles for business or opportunities?

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