# Investigating the Role of Accounting Information in Investment Decisions and Supply Chain Management

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Abstract— Today, competition between organizations and companies has become a global competition. Because of the creation and expansion of this global competition among different businesses companies, many organizations are looking for ways to gain competitive advantage. One of the ways to gain competitive advantage is to focus on the supply chain and improve it. By providing timely, accurate and credible information, information technology improves the performance of the company and its partners in the supply chain. The use of IT tools has affected the supply chain capabilities and subsequently, the supply chain performance is also affected. For this reason, this study examines the impact of information technology on supply chain management. Based on the results of the research, it was determined that the use of information technology in supply chain management increases the quality, reliability and accuracy of information, operational efficiency and improving performance, coherence and collaboration, reducing costs and differentiating products or services.

**Keywords**— Accounting Information, Supply Chain Management, Supply Chain Performance, Investment

#### 1. Introduction

Taking a look at the history of business shows that human being that started to perform economic activities from the beginning is always seeking to identify or create a path to facilitate their activities and gain more profit. [1-3]. One of the most important factors is to increase profit, create facilities for the proper management of intraorganizational processes, communicate between business parties and coordinate among all the resources of the organization. Managing and creating the necessary coordination between different departments of an organization is difficult and requires precise planning; Because today that is the era of world trade, the era of e-commerce, the era of competition, the era of technology, the era of knowledge management, the era of information technology, etc., companies are unable to perform their duties without efficient and capable information systems. We are faced with a wide variety of technology and information systems, each focused on a specific area of the organization's business process and provided powerful tools for managing and being replaced by traditional and old systems. [4, 5].

Supply chain management is one of the most powerful operational paradigms to improve the competitive advantage of manufacturing and service organizations. Nowadays, organizations are not important, but creating value added in the supply chain and its management is happened. On the other hand, by the rise of globalization and international competition and the introduction of new technologies such as information technology, many other policies and past experience don't have needed efficiency. It can be said today, all organizations are in some way exposed to IT developments, and the effects of ICT on all supply chain areas are evident from communication with suppliers to production and communication with customers. Therefore, the use of information technology is effective in improving the supply chain management inevitably. Therefore, in this research, we intend to examine the impact of the use of information technology in supply chain management. In this paper, after the introduction, the statement of problem and theoretical literature of research will be discussed, and then through a model, the impacts of information technology on supply chain management and the relationship between them has been raised.

#### 2. Research method

### 2.1. Supply Chain Management

Supply chain is a network of facilities and distribution options that perform the following functions: providing materials, converting these materials into intermediate and final products, distribution of these final products to customers. Supply chain management is a strategy by which

the integration of these various functions can be achieved [6]. The concise and comprehensive definitions that can be presented from the supply chain and supply chain management are the supply chain includes all activities related to the flow and converting goods from the raw material stage (extraction) up to delivery to the final consumer, as well as information flows related to them and composed of the following components:

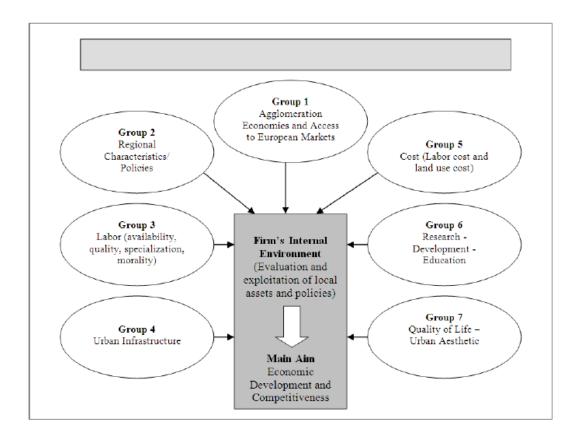
Upstream Supply Chain: This section includes the initial suppliers (which can themselves be assembler or constructor) and their suppliers, all of which originated from materials. The main activities of this section are to buy and transport.

Internal Supply Chain: This section includes all processes used by an organization in converting transported data to the organization by suppliers to outputs, since the material enters the organization until the final product is distributed to the outside of organization; The activities here include material transportation, inventory management, construction and quality control.

Downstream Supply Chain: This section includes all processes involved in distributing and delivering products to the final customers. It is observed a lot that the supply chain ends when the

product is delivered or consumed. Activities here include packaging, warehouse and transporting. These activities may be carried out using multiple distributors, such as wholesalers and retailers. Supply chain is in all shapes and sizes and may be very complex. Supply chain for a car includes hundreds of suppliers, thousands of construction workshops and assembly workshops, warehouses, brokers, direct vendors, wholesalers, customers, and support tasks such as product engineering, purchasing agencies, banks and transfer companies.

Generally, the supply chain is a chain that includes all activities related to the flow of goods and converting materials, from the stage of preparing raw material to the delivery of the final goods to the consumer. There are two flows of information and flow of financial resources and credits about flow of goods. Supply chain management is a combination of art and science that is used to improve access to raw materials, products or services, and transfer them to the customer. Therefore, supply chain management is the process of integrating supply chain activities and related information flows by improving and coordinating activities (supply chain of production and supply product).



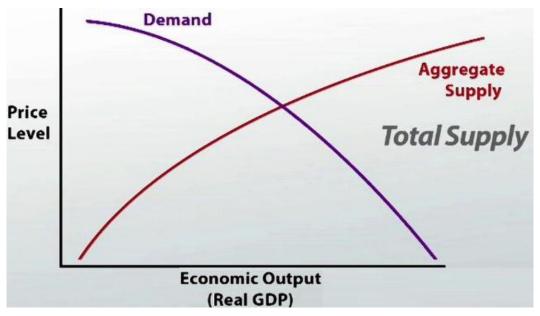


Figure 1. Conceptual model of research derived from the cost of quality model

## 3. Relationship between Information Technology and Supply Chain Management

Today, the use of information technology as a prerequisite for effective control of complex supply chains has been considered. A supply chain that is fully integrated with the IT system is a chain in which nearly all major organizational commercial relations with suppliers and customers are digitally activated or deactivated [8]. In this section, the role of IT in supply chain management as well as its effects and benefits will be discussed.

## 3.1. The importance of using information technology in the supply chain

Information technology with the possibility of sharing a large amount of information along the supply chain including operational information, transport and data related to strategic planning is able to integrate supply chain partners, provide organizations with forward-looking capabilities, and improve production planning, inventory management, and distribution. Therefore, all companies in today's market have implemented or are moving IT into the flow of supply chain management activities [9]. Information is one of the main sources of power for the modern supply chain, and information technology is known as a critical factor in the supply chain. This is due to a partnership that can enhance the performance of a company alone as well as the overall supply chain [10].

## 3-2 Role of Information Technology in Supply Chain Management

Information Technology and (communications) play a central role in supply chain management in the following aspects: First, IT allows companies to increase the volume and complexity of information they need through which communicate with their business partners. And secondly, information technology enables companies to create supply chain information including inventory level, delivery status and planning and scheduling for production instantly and accurately. information enables companies to manage and control supply chain activities. The third aspect is that technology information by creating better coordination within the company and among companies creates alignment in the prediction and planning of operations between companies and suppliers [11].

## 3-3. Functional Roles of IT in the Supply Chain Management

Functional roles of IT in supply chain management are as follows: (1) performing transactions: The most prominent role of information technology in supply chain management is to reduce the resistance in transactions between supply chain partners through effective information flow [8]. It can be said that the use of information technology in the supply chain will improve the efficiency of the chain by

Reducing uncertainty due to the lack of availability, incompleteness and distortion of information. [12] Co-ordination: Information technology plays an important role in strengthening cooperation in the

supply chain through information sharing. (3) Supporting decision: Information Technology supports the decision-making process in the supply chain. In this case, computer analysis power can be used to help to make management decisions.

## 3.4. The effect of using information technology in supply chain management

In this paper, a conceptual model for studying the impacts or benefits of using information technology in supply chain management is provided, which includes:

1. Cost reduction; 2. Operational efficiency and process improvement; Increasing efficiency; Improving capital management and inventory control; Increasing agility and flexibility; Reducing delivery time; Improving coordination and eliminating waste things in processes and tasks; 3. Quality, Reliability and accuracy of information (customer satisfaction and services, customer service, increasing knowledge and improving planning and management; 4. Coherence and collaboration (improving coordination, partnership management, and communication) among different parts of the supply chain; -5 Differentiation of products or services (increasing value added, innovating and developing new products or services)

## **3.5.** Steps of Effectiveness of Supply Chain:

Continuing timely delivery of the product: Continuity in timely delivery means the most effective use of technology that you can ensure with timely and accurate information delivery systems.

Thinking about the co-operation and the demand process: Paying attention to the cooperation among supply chain members will have a direct impact on the efficiency of the supply chain

Quality preservation: poor quality management can stop a supply chain.

Information Management: Complex information management becomes an important part in the success of supply chain by assigning manufacturing process outside the organization and the purchase of pieces from the pieces-makers.

Evolution Management: Even by removing all the advanced technologies of the world, it cannot be created an entirely fluid supply chain, so attention to change management has become very important. Choosing the right technology: Choosing the right technology that is compatible with organizational goals is the great key of success, the current organizing for the supply network in future: Organizing operations and training is one of the most important steps that can make a competition for maintaining a supply chain.

## 4. Summary

The subject of this paper is to examine the impact of IT on supply chain organization. This paper describes the concept of supply chain management, the main processes of supply chain information technology, and the impact of information technology on supply chain and the impact of information technology on intraorganizational and outsourcing supply chain synchronization. The results of this paper show that IT plays an important role in improving managerial decisions and plays a key role in improving the supply chain performance, and by adopting and using the correct information technology, the overall supply chain efficiency can be improved.

#### 5. Conclusion

Today, the vital role of accounting information is considered especially for investors and other users. Appropriate, timely and accurate decision making by senior executives of organizations and the establishment of precise and effective controls by them on the operations of commercial and economic units is possible only through reliable and timely financial information. In this regard, actual and potential investors, creditors, rivals and government, and ... are interested in knowing results and financial activities of institutions. Obviously, this information can only be provided through a complete and accurate accounting system. The purpose of this research is to achieve the impacts of using information technology in supply chain management. By the use of information technology, information is exchanged clearly and transparently between supply chain loops (supplier loop, producer loop and customer loop). The use of IT tools affect positively on the supply chain performance, such as information exchange, coordination and the transparency of information. The adoption of information technology in the supply chain management system can improve the sharing of information and coordination among the partners and increase the competitive advantage of the organization. The use of information technology in supply chain management increases the quality, reliability and accuracy of information, operational efficiency and improving performance, coherence and

#### References

- [1] A.P. de Barros, C.S. Ishikiriyamab, R, Cordeiro Peresc and C.F. Simões Gomesd, "Processes and benefits of the application of information technology in supply chain management: an analysis of the literature," Procedia Computer Science, vol. 55, pp. 698 –705, 2015.
- [2] A. Blankley, "A conceptual model for evaluating the financial impact of supply chain management technology investments," The International Journal of Logistics Management, vol. 19, pp. 155-182, 2008.
- [3] F. Wu, S. Yeniyurt, D. Kim, S.T. Cavusgil, "The impact of information technology on supply chain capabilities and firm performance: A resource-based view," Industrial Marketing Management, vol. 35, pp. 493-504, May 2006.
- [4] B. Fin, "Performance implications of information technology implementation in an apparel supply chain," Supply Chain Management: An International Journal, vol. 11, pp. 309-316, 2006.
- [5] Alam T., & Faridi M, Conflicts in Supply Chain Management. VSRD international Journal of Business and Management Research, 1(10), 648-654, 2011
- [6] Al-Bawab, A. A. Impact of Decentralization and Responsibility Accounting in Performance Evaluation for The Decentralized Entities at the Yemenian Banks (An Empirical study). Interdisciplinary Journal of Contemporary Research in Business, 3(11), 611-626, 2012
- [7] Demir, A. Y. Supply Chain Management Practices in an Alternative Food Network: The First Organic Marketplace in Turkey. International Journal of business and social science, 4(9), 179-187, 2013
- [8] Fowzia, R. Use of Responsibility Accounting and Measure the Satisfaction Levels of Service Organizations in Bangladesh. International Review of Business Research Papers, 7(5), 53-67, 2011

- [9] Khan, H R. Food Inflation and Agricultural Supply Chain Management. 16th Conference of Globoil India, Mumbai (BIS central bankers' speeches), 2012
- [10] Marius C. D., Denisa C. M. & Florina B. I. Managerial Accounting a Source of Information for an Efficient. Procedia - Social and Behavioral Sciences, 62, 521 – 525, 2012 https://doi.org/10.1016/j.sbspro.2012.09.08
- [11] Shabani N., Mahboobe A. & Farzane G. The Influence of Product-related Attributes of Customers on Financial Performance. Kuwait Chapter of Arabian Journal of Business and Management Review, 2(10), 55-62, 2013 https://doi.org/10.12816/0001249.
- [12] Tiwari, S. B. Challenges and Prospects of Emerging Management and Accounting of Green Supply Chain in the Next Millennium. International Journal of scientific and research publications, 3(6), 1-12, 2013
- [13] Narayana, S.A., Pati, R. K., Vrat, P. Research on management issues in the pharmaceutical industry: literature review. International Journal of Pharma- cuticle and Healthcare Marketing 6(4),351–375, 2012
- [14] Quinn, M. Forget about profit, cash flow is king. Wall Street J.(accessed 15.07.2012)from).
- [15] Ukaegbu, B. The significance of working capital management in determining firm profitability: Evidence from developing economies in Africa. Research in International Business and Finance31, pp. 1–16, 2014
- [16] Vinodh, S., Anesh Ramiya, R., & Guatham, S.G. Application of fuzzy analytic network process for supplier selection in a manufacturing organization. Expert Systems with Applications, 38, 272-280, 2011