

Electronic Accounting Information Systems in Providing Cash Budget and Supply Chain Management

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Abstract

This research has been developed for the purpose of explaining the effect of the use of electronic accounting information systems and their role in preparing cash budget and supply chain management via exploratory descriptive method, reviewing the supply chain literature. Studies have also shown that factors such as the breadth of the organization, the degree of success, uncertainty and pressure of other chain partners play an important role in the adoption of information technology. In conclusion, fast, accurate and timely access to financial information is a key criterion for the development of organizations, including government agencies.

Keywords: Electronic Accounting, Information Technology, Budget.

Sistemas de información contable electrónicos en el suministro de presupuesto en efectivo y gestión de la cadena de suministro

Resumen

Esta investigación se ha desarrollado con el propósito de explicar el efecto del uso de los sistemas electrónicos de información contable y su papel en la preparación del presupuesto de efectivo y la gestión de la cadena de suministro a través del método exploratorio descriptivo, revisando la literatura de la cadena de suministro. Los estudios también han demostrado que factores como la amplitud de la organización, el grado de éxito, la incertidumbre y la presión de otros socios de la cadena juegan un papel importante en la adopción de la tecnología de la información. En conclusión, el acceso rápido, preciso v oportuno a la información financiera es un criterio clave para el desarrollo las organizaciones, incluidas de las agencias gubernamentales.

Palabras clave: Contabilidad electrónica, Tecnología de la información, Presupuesto.

1. INTRODUCTION

The advancement of information technology and information systems was the most important factor that has led to fundamental changes in logistics systems in recent decades and provided the basis for the logistics revolution. It can be said that the evolution of the logistics world, which has accelerated since the mid-1970s, has been directly influenced by computer information systems and the effects of these developments on three axes: the reduction of cost and time of logistics activities, progress in logistics planning and control systems of logistics activities and the design and implementation of integrated logistics systems. The appearance of many of these new systems was due to technological advancements in the field of information technology such as electronic data exchange, bar code, identification via radio waves, information exchange via satellite, and more. It had a profound effect on how employees interact with functions various logistics and quicker and more accurate access to the information (Patterson et al., 2003).

Supply chain management is the logical consequence of logistics management. In the 1960s, experts were studying the internal relationships between storage and transportation, which resulted in distribution management. The concept of logistics was introduced in the path of evolution of this discussion. In fact logistics was created to add construction management, procurement, and orders to distribution management. The discussion of supply chain management was seriously addressed in the scientific assemblies since the early 1980's, and many researchers presented a framework and model for it. For example, Forrester, presented a model that became the first model and often provided it as a template for the supply chain. The use of information technology enables the development of supply chain partners to cooperation together to deliver more efficient products to consumers. Information technology allows supply chain partners to function as a single entity. Interestingly, the idea of using information technology to cross the company's boundaries is not new thinking to improve the efficiency. In recent times, in the year 1958, Forrester suggested that the transfer of information between companies would reduce distortion of demand in the supply chain. In 1966, Kauffman argued that improving performance would occur when companies use information technology throughout the boundaries of companies. In general, information technology improves the integrity of supply chain members. In general, the integration, planning and coordination between supply chain institutions are aimed at achieving an optimal solution. In this paper, it has been attempted to examine the effect of information technology on the supply chain from three perspectives of cooperation, the development of business strategies, and, finally, the compilation of studies conducted (Liu, 2007; Kenneth et al., 2011; Kosko & Singh, 2019).

2. MANAGEMENT CHALLENGES OF INTEGRATED INFORMATION SYSTEMS IN LOGISTICS ORGANIZATIONS

Leading managers and experts are often aware of the problems and opportunities of using information systems. Today, integrated information systems based on widespread communication networks, play a very important and critical role in the success of logistics organizations. For example, Internet and intranet platforms can provide the IT infrastructures needed for electronic business, efficient management and earn competitive advantages for such organizations. The move towards the development of integrated information systems has been more acceleration begun as information technology Today, the infrastructure 3 expands. breadth of Internet communication networks and the development of intranet networks, as the main infrastructures of information technology, have provided possible support the business of various organizations. Organizations are able to do the following with reliance on these technologies:

1- Reengineering internal processes of the organization.

2-Implementation of electronic business systems to communicate with customers and suppliers.

3- Creating extensive collaboration and interaction between the groups and the work teams of the organization (Moorthy et al., 2012; Kumar et al., 2015; Marques & da Silva, 2017).

3. TREASURY MANAGEMENT

Cash management has goals such as controlling total expenditures, effective and efficient implementation of the budget, reducing government borrowing cost, and increasing opportunity cost and resources efficiency. Cash control is one of the key elements in macroeconomics and budget management. Of course, budget management should have a proper cash management system because there is no alternative to checking the correctness of budget execution. Efficient budget execution requires that claims are paid on the basis of contracts terms, revenues are collected in a timely manner, costs are reduced and borrowed at the lowest possible interest rate, or additional money may be generated through the issuance of bills of income. Payments should also be timed accurately according to the due date. In the past, most governments did not pay enough attention to efficient cash management issues (Indriastuti, 2019; Ghazanfarpour et al, 2013).

Spending units did not pay attention to borrowing costs because the Ministry of Finance had already considered their interest paid in the budget. However, there is the fact that the credit granting of the banking system to the state is a key objective in macroeconomics and an indicator of performance in financial programs. The IMF also takes it into consideration and supports, and the growing separation between central bank activities and government budget funding also highlights the importance of efficient cash management. Focusing on improving financial performance has also affected cash management, and in this regard, some countries have applied reforms to make more control over cash for centers of spending credit and have developed tools to ensure the discipline of the entire financial sector (Turban et al., 2002).

In terms of cash management, different methods for concentrating cash balance have the same results. Sanders & Premus (2005) at the first stage, when transaction payments and accounting control are with the full responsibility of the treasury, cash management and costs control are more efficient. In countries with poor governance, especially in countries where the Treasury is responsible for selecting suppliers for payment, the focus of accounting controls and central management of cash flow can be ineffective and even corrupt.

Observing discipline is one of the essential elements for efficient government financial management, which is guaranteed by periodic increasing control tools. reviews. strengthening accountability, increasing citizen participation and, above all, transparency. In fact, the effects of the reform of the liquidity management system on budget management in the budget execution agencies should be considered and reforming the system leads to cost efficiency. The implementation of the central liquidity management system does not pose significant problems for the central sectors of the key ministries, but in the regional departments, the organizational payment system should consider the public management system and the banking infrastructures in the country concerned.

In many countries, the normal course of liquidity management can include focusing transactions at central levels through one-way treasury account, and using an accelerated prepayments method for districts agencies. Before any correction remote in liquidity management systems, its effects on the banking system should be evaluated. In some countries, the implicit objective of liquidity management regulations is to support bankrupt banks. Restructuring the structure of the banking system in these countries is a matter of policy that needs to be addressed. On the other hand, in some countries, the transfer of management of government accounts to commercial banks faces them with cash flow problems, especially if the treasury is not able to meet its obligations. The concentration of cash flows leads to paying attention to timely payments, but executive agencies do not release budget from the necessity of reporting, since effective monitoring of budget implementation requires consideration of obligations and review of expenses (Wong et al., 2014).

4. INFORMATION TECHNOLOGY AND ITS EFFECT ON SUPPLY CHAIN MANAGEMENT BASED ON COLLECTING PAST STUDIES

IT development has provided an effective backup for supply chain management. There are many questions about how information technology influences supply chain management and how to use IT in supply chain management. According to the studies, they can be collected in three aspects below (Uçaktürk & Villard, 2013).

Strengthening the distribution and transmission of information

Strengthening the distribution and transfer of information can effectively improve supply chain management. When members of a supply chain decide only based on their own lower-level members' information, the system is experiencing a phenomenon called demand magnification. The cause of this incident is not the unreasonableness of all the members of the chain, but because of reasonable and natural decision making in situations where information is not clear and precise. This will have a negative effect on all supply chain members. In order to prevent such an occurrence, the use of information technology to share and transfer accurate information and also to shorten the delay time is an important strategy (Tudor & Mutiu, 2005).

Helping to create a complete and comprehensive customers demand model

The final consumer is an important component of the supply chain. One of the important tools for evaluating supply chain management is the accountability status of customers demand. A better understanding of customers demand in a supply chain is very essential and fundamental. Many articles have provided hypotheses, but demand is a random phenomenon, and responding to demand is not so ideal, than what we assume. Therefore, demand forecasting in inventory control issues in supply chain, selection of different models based on different situations and creation of a desirable demand model is very necessary. The development of information technology and along with the use of information systems as well as inter-organizational information systems can help to create a comprehensive and efficient demand model (Ganeshan, 2002).

Increasing speed in the supply chain

One of the main goals of the supply chain is to provide the right product at the right rate, with the desired quality, at the right time and place. The advancements in information technology and information systems in order to achieve this goal are aimed at improving supply chain performance (Yang et al., 2019; Soo et al., 2019).

5. SUPPLY CHAIN MANAGEMENT AND ELECTRONIC COMMERCE

Supply chain management is based on customer-oriented approach. Accordingly, the timely and complete communication between all the chain elements is a requirement of the chain to understand the needs of the customer and the extent of supply requirements. An appropriate set of integrated software and information systems and extra net and intranet networks are required in order to facilitate the accurate flow of accurate management information. The B2B, B2E model can be used to describe the operations of buying, selling and exchanging products and services and information through computer companies, and especially the Internet with suppliers, using electronic-commerce in the supply chain. Based on another model of electronic-commerce, partner companies can collaborate on a specific field, especially through electronic networks. Such collaboration often occurs between present companies in a supply chain.

The effect of electronic-commerce on supply chain management includes receiving orders via the web network, responding to orders, electronic payments, reducing inventories levels. Generally, supply chain management is one of the electronic-commerce implementation infrastructures. From an industrial point of view, e-commerce between firms occurs primarily in industries where the supply chain has been formed. A producer is always a factor•n the middle of the economic activity process. The manufacturer is the buyer of the goods from his suppliers and a seller of new goods to his buyers.

Traditional and electronic supply chain management

In the traditional SCM, the SCM structure has a two-way, one is the sale and the other is a purchase that flows from the one side of the information and on the other hand the goods and reaches to consumer's hands after passing through its hierarchy. In electronic SCM, with the advent of the Internet, the traditional structure of the above has been changed, part of it has been removed and new sections have been added, including added bases, the SCM process has changed due to its restructuring, and parts are expected to be removed. On the sales side of SCM, the following is traditionally the specifications of the ruler: There is a one to one relationship between the seller and the buyer and the nature of the competitive relationship. Due to the competitive nature of the relationship, the tendency to hide information is high on both sides.

The separation of the SCM process from other processes such as ERP, CRM is the governance of a particular company. But in the electronic or new way, relationships are more than one-to-one, and can be established in different ways, for example, one to all, all to one, and ... As a result, the monopoly rule of a company gives its place to a few corporations or a center. Due to the dominance of participatory attitudes, those relationships have improved and compete (loser-loser) mode has changed (win-win) and the information is exchanged more willingly (Maiga et al., 2014).

6. CONCLUSION

Today, information in a supply chain is an important factor for optimal decision-making for development and survival, and therefore involves two objectives of coordination and prediction and planning. Regarding the importance of information flow and its role in the supply chain, the supply chain has three distinct features compared to individual firms: more coverage, more access channels, and desirable information quality. Information technology improves the distribution and transmission of information and effectively improves the efficiency of the supply chain. Other effects of IT on supply chain management can be named increasing responsiveness, establishing a new relationship with customers to identify their needs, developing sales channels, improving the efficiency of the chain's performance, and improving the competitive position.

Information technology applications in supply chain management include technologies such as identification codes, automated identification and data collection, such as RFID and bar code, electronic data exchange, XML technology, and the Internet. It also includes various information systems and application soft wares such as POS, CRM CAM, CAE, and CAPP, CAD ERP MRPII, EOS, and expert systems. Given the importance of information in the supply chain, it can be concluded that the reason for many inefficiencies in the supply chain is the inaccuracy and accuracy of information and the adequacy of the information systems that supply information processing.

The supply chain is nothing but a set of companies that have come together to provide a service or product, and this set requires information communication to carry out its activities, and although the relationship between companies is not a new issue, but the creation of this Communication through information technology and the recognition of the necessary systems for the exchange of information is vital and the adoption of information technology can lead to improved overall efficiency of the chain. Today, fast, accurate and timely access to financial information is a key criterion for the development of organizations, including government agencies. On the other hand, the present world is based on various technologies, especially IT, so accounting also needs these new technologies to improve its efficiency. Therefore, managers need IT to meet the organization's requirements, while traditional management is unable to provide these conditions. However, in order to increase productivity and avoid centralizing decision making and giving the necessary authorities to managers to manage their supervised units, it is necessary that the accrual accounting system completely identified in the medical sciences universities and institutions affiliated with the Ministry of Health, Treatment and Medical Education and influential factors. So, in this research, the role of information technology in advancing the accrual accounting system in the medical sciences university was investigated, its effect on six components of planning and decision making of managers, data and information management, performance appraisal of organizations and employees, enhancement of safety Information, financial reports method and human.

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