The Impact of Supply Chain Accounting Information Systems Harmonization on Creating a Competitive Advantage for the Iraqi General Commission Taxation

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Abstract- The importance of information technology is inevitable in this information innovation driven business landscape. Keeping in view the importance of information technology, supply chain accounting information system has become popular in information intensive organization. This study has initiated with the objective to shed light on the importance of supply chain accounting information system in general and Iraqi General Commission for Taxation in particular. This study investigates the role of supply chain accounting information system to create competitive advantage for Iraqi General Commission for Taxation. Interviews were conducted from selected officials of Taxation department. The results showed that all the respondents agreed that supply chain accounting information system is a useful approach to create competitive advantage in term of cost reduction, enhancing operational efficiency, increasing the scope of organization and strengthen the internal control system. Hence, this study proposed to implement supply chain accounting information system in Iraqi General Commission for Taxation. The integration of information technology with conventional accounting system will improve the adequacy of tax department which ultimately strengthen the economy.

Keywords- Iraq, General Commission for Taxation, Competitive Advantage, Supply Chain, Accounting Information System.

1. Introduction

The language of business is accounting as it plays a central role for economic decision making. Account is a system which provides quantitative information which is

International Journal of Supply Chain Management IJSCM, ISSN: 2050-7399 (Online), 2051-3771 (Print) Copyright © ExcelingTech Pub, UK (<u>http://excelingtech.co.uk/</u>) common for any business either from profitable to nonprofitable. Accurate and timely information about business position and its operating performance is vital to make decisions about any organization. The most of decision making revolves around allocation of proper resources where importance of financial information is significant. Accounting is the only way to get financial information necessary for decision making. The language of business is quantitative in nature and accounting provides the platform to organize business transactions to communicate with stakeholders ranging from owners, stockholders, lenders, managers, employees government and regulatory agencies. Consequently, accounting helps to take economic and operational decision making which is significant for the survival of any business. Similarly, the timely information is more significant in present competitive environment. Therefore, the reliability on supply chain accounting information system is increasing with the passage of time due to accurate and timely flow of accounting information [1].

The gigantic development in 21st century has led by the development in information and communication technology. Hence, supply chain accounting information system has emerged an integral part of any organization in this modern epoch. According to Porter's five forces model, organization create competitive advantage either on the basis of cost leadership, differentiation or innovation. An information system helps to gain competitive advantage in either strategy. Organizations can reduce the cost of business operations with the help of information system. Furthermore, accounting information system supply chain reduces the cost of accounting department by providing accurate and timely online information. Seemingly, information system is a source of innovation by providing accurate, induplicate and timely information for decision making. In addition to this,

organization can enhance information exchange system by developing virtual network with external stakeholders to get information advantage. [2] addressed that accounting information system supply chain is an organized way of collecting, organizing and reporting financial information with the purpose of providing accurate, timely and direct information for decision makers. Accounting information system supply chain is away to improve internal communication mechanism of organization. Accounting information system supply chain works as any information system with the aim to collect raw data at first level and then disseminate useful information for decision makers. The accurate flow of information helps decision makers to take efficient and timely economic decisions. In this information revolution, organizations are trying to strap their information management system to survive. The accounting information system supply chain brings transparency in financial transactions of organizations. The importance of accounting information system supply chain is more significant in government organization due to large public stake in these organizations [3].

The General Commission for taxes in Iraq is one of the government institutions which need to develop an accounting information system supply chain due to its critical importance for nation's success. The taxation department has critical position in any economy. The efficient taxation department leads the economy towards better future. Apart from the policy issues, General Commission for Taxes is constrained to deal with large number of tax demands from International Oil Companies and other institutions. Due to manual system a delay in tax deposit is experienced. Furthermore, delays in tax receipt, tax clearance certificates and audits are also witnessed. In addition to this, the foreign investment in major sectors of economy can be attracted by designing an efficient taxation department to gain the confidence of investors. This study will assess the importance of developing an accounting information system supply chain for General Commission of Taxes in Iraq. Furthermore, the accounting information system supply chain will be assessed as a competitive advantage to create harmonization between branches of Iraqi General Commission for Taxes [4]. The rest of the study is structured as, the second part discusses past literature to develop theoretical framework of this study. Methodology explains the type and design of study to check the propose framework. The next part carries results and discussion on the outcomes. Last section concludes the research and scientific implications of this study.

2. Literature Review

Accounting information system supply chain is an organized way of collecting, organizing and reporting financial information with the purpose of providing

accurate, timely and direct information for decision makers. Accounting information system supply chain is away to improve internal communication mechanism of organization. Accounting information system supply chain works as any information system with the aim to collect raw data at first level and then disseminate useful information for decision makers. The accurate flow of information helps decision makers to take efficient and timely economic decisions. The framework of accounting information system supply chain process monetary data and helps to improve decision making with regards to coordination and control of operations. It is characterized as a subsystem of an information framework, and its mandate is to process financial and non-financial information that straightforwardly influence the handling of finances. Accounting information system supply chain is referred as a complex computer based framework which has the ability to enhance resources capability with the power of information technology. Accounting information system supply chain (AIS) is not only useful for internal stakeholder but it is equally useful for external stakeholders to assess timely accurate financial information for decision making. Hence, accounting information system supply chain gives useful support to all external and internal parties for smooth processing of operations.

The information delivered by accounting information system supply chain is viewed as a fundamental wellspring of vital information for the organization [5]. It assumes a noteworthy part in decision choices either operational or strategic. These choices add to enhancing the organization's position and give competitive advantage mirrored in the overall organizational performance, hence organization achieve long term sustainability. Conclusively, the new innovation powerfully affects competitive scope of organization. Accounting information system supply chain enables organizations to facilitate and communicate with business units dispersed over large geographical location. Information innovation is likewise making numerous new interrelationships among organizations, extending the extent of organization in which an organization must contend to accomplish competitive advantage. The utilization of AIS has expanded primarily, as it has decreasing cost, time and enhancing the operational efficiency. Financial organizations are probably considered as data concentrated. Such organizations are normally among the first and most excited clients of information systems. For instance, physical handling will keep on dominating in non-financial organizations instead of information processing [6].

In any organization, data innovation powerfully affects competitive advantage in the form of cost reduction. The information innovation enables organizations to increase competitive advantage by making changes in competitive degree. As presented in earlier literature, information innovation can affect an organization's cost in any piece of the organization work. The information authenticity affects operational cost and time whereas data duplication had a substantial impact over cost and time. Similarly, information system diverts the cost driven activities of organization which boost the overall competiveness of organization. [7] asserted that AIS acquaint organization with essential external information with internal flow of information by utilizing nodes in the vale chain. Accounting information system supply chain changes the overall design and delivery of organization as well as organizational policy [8].

AIS modify the competitive advantage by increasing the scope of organization. The innovation builds an organization's capacity to arrange its operations on a broader spectrum like national and international. It can open the energy of more extensive geographic degree to make competitive advantage. As AIS turns out to be more boundless, the chances to exploit new prospects will just incremented. The advantages of information flow be that as it may, can accumulate just when the data innovation spread all through the association can impart. Totally decentralized authority and utilization of AIS will impede the potential outcomes.

3. Methodology

This study is quantitative in nature hence, utilized quantitative data collection approach to realize the objectives. This study utilized case study approach to investigate the proposed framework. The philosophy of case study is used as the center approach all through this examination work. It is said that case study itself appears to be more adaptable and much effective way to deal with particular scenario. The procedure of the case study has been advanced carefully being the central way out to do

contextual research. The case study separates itself from different methodologies as it proceeds while exploring simultaneous arrangement of events alongside real life settings. It turns out to be significantly more essential whereby phenomenal limits exist amongst setting and phenomenon appears to be unclear [9].

Interviews were conducted from managers and top official in Iraqi General Commission for taxation. Structured interview approach was adapted to record responses of selected managers in Iraqi General Commission for Taxation. Furthermore, the sampling method for this study is convenience sampling due to the time and cost constrains. In total 37 employees were interviewed including senior managers, auditors and tax officers. The structured questionnaire for this study developed by careful review of previous studies to realize the advantage of accounting information system supply chain for Iraqi General Commission for Taxation. The accounting information system supply chain was assed as competitive advantage and measured in four dimensions. The first dimension explained as the low cost advantage whereas second dimension is measured as internal control. Third dimension is regarded as efficiency of operations and fourth dimension is explained as enhancing scope of business [10], [11], [12].

4. Results and discussion 4.1. Measurement Model

The reliability and validity is an essential part of survey studies to measure the consistency and effectiveness of collected responses. For the said purpose, reliability analysis was run by measuring cronbach's alpha. Cronbach's alpha is a powerful tool to measure the internal consistency of responses. Table 1 presents the results of Cronbach's alpha where all the values are under threshold level of 0.7 as said by [14], [15].

Table 1: Reliability Analysis				
Variables Cronbach's Alpha				
Low Cost Advantage	0.873			
Internal Control	0.843			
Operational Efficiency	0.819			
Scope Enhancement	0.798			

The validity of instrument was measured through convergent and construct validity. Table 2 illustrates the results of convergent validity of instrument. Average variance extracted value and composite reliability value for each dimension was considered to measure the convergent validity.

Variables	Composite Reliability (CR)	Average Variance Extracted (AVE)
Low Cost Advantage	0.911	0.724
Internal Control	0.831	0.889
Operational Efficiency	0.954	0.793
Scope Enhancement	0.843	0.810

The construct validity of instrument is measured by taking square root of AVE. The value of square root is greater

than the inter-correlation of dimensions which fulfills the requirement of construct validity.

Table 3: Construct Validity					
	Low Cost Advantage	Internal Control	Operational	Scope	
			Efficiency	Enhancement	
Square Root AVE	0.90	0.850	0.9428	0.890	
AVE	0.810	0.724	0.889	0.793	

4.2. Descriptive Analysis

The descriptive analysis is carried out by measuring the mean values of responses to present an overview of results. To assess the normality of responses skewness and kurtosis were calculated. Table 4 illustrates descriptive statistics where noted that all the values for skewness and kurtosis are under the standardized limit of 3 to -3 for

skewness and 8 to -8 for kurtosis. Furthermore, it is noted that low cost advantage got the maximum mean value among all dimension. However, scope enhancement secure least mean value among all dimensions of accounting information system supply chain as competitive advantage.

Table 4:	Descriptive	Statistics
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Variables	Mean	Skewness	Kurtosis
Low Cost Advantage	4.95	2.786	1.833
Internal Control	4.78	3.972	4.297
Operational Efficiency	4.87	4.638	3.824
Scope Enhancement	4.01	4.873	5.822

4.3 T-Test Results

Further, t-test is applied to analyze the mean values for each dimension of competitive advantage of accounting information system supply chain. Table 5 presents the ttest results [17].

Table 5- Res	pondent's	s respo	nses: stat	tistical anal	ysis of resp	onses

Accounting information system supply chain as Competitive Advantage	Mean	S.D	T-Value	Sig.
Low Cost Advantage	4.95	0.08	1.228	0.00
Internal Control	4.78	0.37	1.128	0.00
Operational Efficiency	4.87	0.14	0.831	0.00
Scope Enhancement	4.01	0.87	0.844	0.00

It found that all the dimensions have got high values on the rating scale. However, low cost and operational efficiency got slightly higher means values then internal consistency and scope enhancement. For the results it is clear that accounting information system supply chain can

improve the overall competitive position of Iraqi General Commission for Taxes. The accounting information system supply chain will help to improve the accuracy and speed of operation. Further, it will help to provide correct and accurate information about tax policies, news and

information which will help to bridge the trust between taxpayers and tax collection department. The collection of taxpayer information will be more efficient which will help to smooth the collection process. Similarly, accounting information system supply chain will help to enhance cooperation among branches of tax commission by creating real time connection. In addition to this expansion of taxpayers will be more feasible due to smooth accurate and timely information database. The responsibility and accountability in Iraqi tax commission will improve due to transparent flow of information. The findings of this study are in line with previous studies on the discussed phenomenon [13], [16].

5. Conclusion

This study aimed to assess the acquaintance of accounting information system supply chain for Iraqi General Commission for Taxation to create competitive advantage. This research adopted case study approach to empirically investigate the competitive advantage of accounting information system supply chain for Iraqi General Commission for Taxation. The study concludes that accounting information system supply chain is the need of this technology innovation driven epoch. Hence, accounting information system supply chain is inevitable to improve the efficiency and performance Iraqi General Commission for Taxation. This study suggests implementing the accounting information system supply chain in a way that will be contributed in expanding the adequacy of tax department [17], [18].

References

- [1] Memani, R. "Accounting a Milestone for Global Markets". The Financial Express, 2006.
- [2] Barbera, M.R. "Management Accounting Futures: A Delphi Study, Australian Society of Certified Practicing Accountants", 1996.
- [3] Cramm, S. "Small IT Budget? Pursue value driven development", Harvard Business Review, 2008.
- Scapens, R.W., Jazayeri, M., and Scapens, J. "Integrated information systems and the implication of management accountants", Management Accounting Research, Vol.76, pp 46-48, 2003.
- [4] Beechy, T.H. "*Does full accrual accounting enhance accountability*?" The innovation journal: The public sector innovation journal, Vol 12, No. 3, 2007.
- [5] Granlund, M., and Mouritsen, J. "Problematizing the relationship between management control and information technology, Introduction to the Special section on Management control and new

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information technologies", European Accounting Review, Vol. 12, No. 1, pp. 77-83, 2003.

- [6] James, A. Accounting Information System, 2nd edition, London, 1984.
- [7] Romney, M.B, and Paul, J. "Accounting Information Systems", Prentice Hall Business Publishing, 12th Edition, P. 26, 2012.
- [8] Ismail, N., and Malcolm K. "Factor Influencing the Alignment of Accounting Information System in Small and Medium Sized Malaysian Manufacturing Firms", Journal of Information System and Small Business, Vol. 1, No. 1-2, PP. 1-20, 2007.
- [9] Granlund, M., and Mouritsen, J. "Problematizing the relationship between management control and information technology, Introduction to the Special section on Management control and new information technologies", European Accounting Review, Vol. 12, No. 1, pp. 77-83, 2003.
- [10] Brynjolfsson, E., Hitt, L.M. Computing Productivity: Firm-Level Evidence, Review of Economics and Statistics, Vol. 85, pp. 793-808, 2003.
- [11] King, W.R., Grover, V., and Hufnagel, E. "Using information and information technology for sustainable competitive advantage: some empirical evidence", Information and Management, Vol. 17, pp. 87-93, 1989.
- [12] Lucey, T. "Management Information Systems", London: DP Publications Limited, p. 326, 1991.
- [13] Domeika, P. Secondary Economic Information of an Enterprise and its Computerized Arrangement//Engineering Economics, ISSN 1392-2785. Kaunas: Technologija, Vol. 45, No. 5, pp. 12– 18, 2005.
- [14] Emeka-Nwokeji. Repositioning Accounting Information System through Effective Data Quality Management : A Framework for Reducing Costs and Improving Performance. Int. J. Sci. Technol. Res. Vol. 1, pp. 86–94, 2012.
- [15] Fornell, C., Larcker, D.F. Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. J. Mark. Res. Vol. 18, p. 382, 1981. https://doi.org/10.2307/3150980
- [16] Kline, R.B. "*Principles and practice of structural equation modeling*", New York: Guilford Press, 1998.
- [17] Heng, M., Fiedler, B., and Kandunais, C. "Implications of supply chain management for accounting information systems," PACIS Proceedings, p. 86, 2005.
- [18] Lenny Koh, S., Demirbag, M., Bayraktar, E., Tatoglu, E., and Zaim, S. "The impact of supply chain management practices on performance of SMEs," Industrial Management & Data Systems, Vol. 107, No. 1, pp. 103-124, 2007.