

# Impact of Dimensions of Centralization Procurement System on Financial Performance

## Special Reference to Health Care Industry in Sri Lanka

H Anuradha<sup>1</sup>, UG Rajapaksha<sup>2</sup>

<sup>1</sup>Faculty of Graduate Studies, Sir John Kotelawala Defence University, Sri Lanka

<sup>2</sup>Department of Management and Finance, Sir John Kotelawala Defence University, Sri Lanka

[anuradhan@outlook.com](mailto:anuradhan@outlook.com)<sup>1</sup>

[ugrajapakse@kdu.ac.lk](mailto:ugrajapakse@kdu.ac.lk)<sup>2</sup>

**Abstract** - The private sector contribution in provision of health care in Sri Lanka has been growing tremendously during last two decades. There were several international standard tertiary care private hospitals established in recent past and many more are to operate soon. The capacity of these institutions is ranging from highly sophisticated multi specialized hospitals to small-scale medical centres. Private sector always focus to obtain optimum value from investment. Health care sector also spend more than 40 percent from income to purchase the goods and services. Around the world, wide organizations use centralize procurement system to purchase the goods and services. Centralize procurement approach is meant to obtain maximum benefit form efficient supply chain activities. Centralization of procurement is highly focuses not only on individual processes but also focuses on overall operations, further centralizing can bring greater control over the various buying processes that company engages in. This greater control allows for more efficiency and more visibility into how the company is obtaining its resources. In keeping with this study and many of studies, there are five main areas that embody within the centralizing procurement method and facilitate to reinforce the financial performance in a company as Time Compression, Negotiation, Managing quality, Activity Management and Relationship Management. ABC laboratory chain is one of the main laboratory chain in Sri Lanka which implements centralizing procurement activities. Nineteen sample of employees have used and, by using interview method their ideas regarding the variables were collected. Thematic method is used to analyses the collected data. The study reveal positive impact of centralization of procurement activities on financial performance of the ABC laboratory chain as the findings.

**Keywords:** Time Compression, Activity Management, Managing Quality, Relationship Management, Negotiation, Financial Performance, Centralization.

### I. INTRODUCTION

Sri Lanka's health care sector is one of the best healthcare sector in the world. According to the reputed UK medical journal "The Lancet", Sri Lanka has placed ahead of all, but one its South Asian neighbors in access to healthcare and quality. According to the Global Burden of Disease Study (GBD) published in the latest issue of the UK medical journal, Sri Lanka has been ranked at 73, while only Maldives from South Asian Association for Regional Cooperation (SAARC) region stood ahead with a ranking of 76. According to the World Health Organization's statistics total expenditure on health as percentage of Gross Domestic Product (GDP) 2014 is 3.5 present. According to report issued by the embassy of the kingdom of the Netherlands, "While the public sector operates almost three times as many hospitals in the private sector, healthcare expenditure directed towards the private sector accounted for almost 55 percent of total healthcare expenditure in 2012". Total estimated private expenditure recorded a

Compound Annual Growth Rate (CAGR) of 10.8 percent over the last 12 years reaching LKR 141 billion for year 2012. The private sector caters to the majority for the outpatients 60 percent and currently only addresses one-tenth of inpatient numbers in the country. There are approximately 197 private hospitals distributed in the island wide while the big four including Asiri Hospital Holdings, Durdans PLC, Nawaloka Hospitals PLC and Lanka Hospitals PLC dominate the marketplace. It is noteworthy that all four have a significant concentration of facilities in Colombo with a regional presence. The private healthcare sector is characterized by the propensity of healthcare seekers to purchase services commensurate with increasing disposable income. Health care service is a humanity service, and service providers should more flexible to the customers (Patients) than the other industries. Prices should be fair and reasonable for customers. Earn profit and manage the lion share of the market is business target. Earning profit and capture the market with providing a humanity service is a big challenge. ABC laboratory top management believe managing the purchasing through centrally is the best way to grow the financial performance of the organization. This problem was

addressed in this study by the impact of centralization of procurement activity tools like time compression, negotiation, activity management, relationship management and managing quality. Implemented centralization of procurement practices has become a major factor impact to reduce the cost and increase the financial performance in ABC laboratory chain.

**A: Research Problem**

ABC laboratory chain has its own goal to reduce the cost of supply chain through the scientific approach. Presently 28 laboratory purchasing's are being controlled by their three hospitals. Currently, those three hospitals purchase the items by decentralising basis and purchase the required items according to the individual lab requirement. Laboratory to laboratory, requirements are difference, required quantities are difference. Supply chain officers have annual goals to reduce the expenditures. Having given this target by the top management, supply chain officers are individually trying to achieve the targets. However, it has been understood that the supply chain officers have yet to achieve this targets to the optimum level. Laboratory reagents and consumables are the largest and budget consumers of the laboratory chain. According to 2015 and 2016 expenditures report, it is estimated in between 120 million rupees to 150 million rupees per year. Due to decentralization of purchasing, purchase orders are placing for specific hospital lab requirements. Due to that, for the small order quantities suppliers could not offer a best price and always trying to maintain higher price for the items. According to the supply chain goals, supply chain department should maintain a low price for each item and should reduce the price through

**Dimensions of Centralized Procurement**

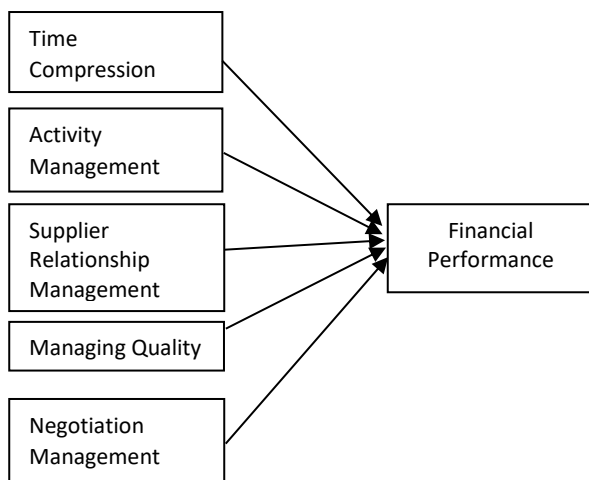


Figure 01. The Relationship between Effects of Centralization of Procurement on Financial Performance. Source: Developed by the author (2017)

negotiation and don't allow to increase the price for current purchasing items. But supply chain department is facing many inconveniences to negotiate with the suppliers for small order quantities. Sometimes the minimum order quantity of the suppliers are higher than the quantity of the purchase order. If it is a slow moving item the supply chain department cannot buy more because it could expire before use. Most of the time, the supply chain department do not meet the target savings through negotiations because suppliers avoid negotiations due to small order quantities. In addition, internal audit department has found that the same supplier supplies the same items at different prices to three hospitals. Face to the largest market competition and achieve the targets is a long run. As remedy, top management has planned to centralised the purchasing to reduce the supply chain cost while achieve other objective. Therefore problem of the research is this attempt would be successful or not.

**II. METHODOLOGY AND EXPERIMENTAL DESIGN**

A Conceptual Framework : According to the review of the literature time compression, activity management, supplier relationship management, managing quality and negotiation management were reviewed by the literature of previous researchers as the aspect of centralization of procurement activity according to the researches done by Van (2000) , Johnson (2000) and Lyson (2012) indicated the impact of centralization on financial performance in consistent with research objective. The conceptual frame work as seen in the Figure 01.

Time compression, Activity Management, Relationship Management, Managing Quality, Negotiation Management are the dimensions of procurement centralization. Time compression, Activity Management, Relationship Management, Quality Management, Negotiation Management are the independent variables where financial performance is the dependent variable as shown in the Figure 1. Van (2000) indicated supplier selection, contract negotiations and coordination of activities are the centralization, while Ellram (2008), indicated relationship management also as a part of centralization. Further quality management increased productivity and profit as per Douglas and Judge (2001), Fang (2009) indicated lead time compressing the minimization of the financial performance. Jiang and Qureshi (2006) indicated activity management has considerable impact of financial performance.

B. Sample Profile: This study basically a qualitatively one. As a sample there are nineteen respondents are interviewed using purposive sampling method.

C. Data Collection Method: As the study is a qualitative one, the collection of data was done by using primary data which is using interview method. Even the secondary data also collected by using journals and articles for the literature review and empirical analytical part.

D. Data Analysis: Data analytical part is done by using thematic approach. The potential themes are expected to be Financial Performance, Activity Management, Time Compression, Supplier Relationship, Customer Relationship, Quality Management, Negotiation, Information Power, Legitimate Power and Financial Performance are the themes of the study. Base on the themes thematic approach is organize in order to support the study. Not only thematic approach, even case study approach also plan to use as a qualitative study.

### **III. DATA ANALYSIS**

A. Except in some special conditions like critical accidents and disaster situations lead time not effect to financial performance of the organization. All suppliers are local suppliers, therefore time compression is minimum and should not maintaining a huge stock. There are unique suppliers to specific items and supplier's contribution is very high. Further, analyser machines supplies by the suppliers free of charge and according to the contract agreement user ordering the

reagents according to the consumption. Inefficient drug dealers cannot survive in the market due to the competition. With considering the above all factors, time compression is not affecting to the financial performance of the organization.

B. Most of the organizations outsource noncore activities to the third party organizations to manage their activities. But in health care sector noncore activities also important. As an example, most organizations use third party organization to manage their cleaning activities. But in health care sector cleaning activity also considering as core activity, due to infection control and controlling the communicable diseases. In Sri Lanka, there are no professional and specific cleaning services for outsourcing the hospital cleaning. There are specific methods to clean the operation theatres, wards and clinical areas. Cleaning staff should be skilful and professional. Security service already handover to the third party. If security service supplies with in house, there are lot of limitations to overcome. Finding the skilful experience security officers, managing the terrorist threats and take responsibility of the security, replacement of the security officers, training and upgrade the latest knowledge are very complicated challenges.

C. Through the relationship management, organization has a huge positive impact. Relationship management help to build strong relationship between supplier and buyer in the long run. Better relationship management is a win-win situation for both parties. Through the relationship management organization has earned lots of benefits like exceed the credit periods, flexible contract management, special price schemes and product bonus. Above all factors directly effecting to financial performance of the organization. Especially in the emergency situations, relationship management very important to work out of the frame. During the emergency operations, supplier directly supplies the essential tools and consumables on call and purchase orders are not required. Further supplier buyer mutual understanding grow with relationship management.

D. Quality management applicable for each part of the logistics process. During the purchasing process, managing quality helps to purchase the right item of the right quality and right quantity from the right source at the right time to deliver the right place for right price. It helps to manage unnecessary expenditures, avoid cheap goods, evaluating supplier performance and avoid delivery delays. During the consumption managing the quality helps to avoid misuse and wastage. Managing the quality of the process is the most important thing in healthcare sector. It helps to upgrade the final output result and standardise the process. Above all factors are

directly effecting to the financial position of the organization.

E. Hospital sector also spend between forty to fifty percent from income to purchase the goods and services. Negotiation is the key tool to get maximum benefits to optimum price. Also it is important that both parties investigate the goal of the deal and things need to be achieved through the intended deal in order to create effective negotiation. Effective negotiation should be able to create confidence to supplier that long term business opportunity is possible for them to undertake any capital investment. As mention by interviewees, through the negotiation they have saved millions of money to the organization. Organization has an opportunity to invest the savings money to future investments and face to the market competition strongly. To win the competition between organizations, should deliver optimum service to the customers to competitive price. To cater the optimum benefits to customers, savings through the negotiation playing a vital role. Periodically without increasing the medical package prices or procedures prices, organization should be able to manage the cost. It's directly effect to the financial performance of the organization.

#### IV. Discussion

A. Considering the answers delivered by interviewees, against the impact of time compression on financial performance of the organization, it can be agreed that impact of time compression on financial performance of the organization is very low. Lead time is important to the organization for following factors like flexibility during rapid changes in the market, the ability to outpace company competitors with faster, more efficient output, quicker replenishment of stock to avoid stock outs, lost sales and lost customers, meeting deadlines consistently and easily, increases in cash flow because of increased order fulfilment. Hospital sector is very unique than other sectors, other sectors can achieve above advantages with time compression and can smooth the cash flow and improve to the financial performance. In hospital sector above factors are fundamentals and those factors are the foundation of the health care industry. Suppliers in healthcare industry start with business considering above factors, because single mistake can be a major disaster, therefor mistakes should be minimum. Only ethical suppliers can capture the market, because buyer supplier mutual understanding and trust is the most important thing in health care sector. With these factors, in practical operation, suppliers are very sensitive considering with the other industries. Further laboratory reagent is the "A" category item in laboratory

stock, particular analyser machine, there are no other optional reagent can use, there for laboratory dose not maintain huge stock from reagents due to supplier efficiency. Due to the efficiency of practical operation impact of time compression on logistic is very low. Further (Rad 2008) literature also mention that some products are more important to have shorter lead time to perform competitive supply chain. Most of the time lower lead-time saving money in the supply chain but according to the interviewees, in healthcare sector lead time not playing a vital role to reduce the cost.

B. According to type of the industry core activities cannot be outsourced. Practically other sector's core activities also cannot outsource, but through the activity management of noncore activities particular sectors can save millions of money. Every organization wish to achieve below advantages through the activity management. "**Cost advantages**" is the most obvious and visible benefit relates to the cost savings that activity management can get job done at a lower cost and at better quality as well. According to "**flat world solution**" there is a cost saving of around 60 percent by activity management. Next advantage is "**increased efficiency**". Through the skilful third party, organization can increase the efficiency of the particular work flow. This leads to increase in productivity and efficiency in the process thereby contributing to the bottom-line of the company. "**Focus on core areas**" organizations activity management the core activities to third party organization, because core areas are the back born of any organization. Organizations supposed to get more profit through activity management of core activities. Save on infrastructure and technology activity management eliminates the need for investment in infrastructure as the activity management partner takes the responsibility of the business processes and hence develops infrastructure for the same. Access to skilled resources, no longer need to invest in recruiting and training expensive resources for business. Through the activity management, activity management party should be able to achieve particular advantages to control the cash flow. Above areas highly impact to organization to reduce cost of the operation and saving capital. As an example, some organizations activity management warehouse, distribution, cleaning activities for third party Company, due to specialize service providers available in the market. Comparing with other sectors clinical activities, nursing activities, consultation, all are belongs to core activities in healthcare sector, further other sectors, cleaning activities are belongs to noncore activities, but in health care sector cleaning are different from others. As an example there are unique methods to clean the operation theatre and other clinical sections, therefore cleaning activities also cannot be

outsourced, but it's not a major impact to financial performance of the organization. Through activity management health care sector cannot achieve above advantages due to type of the service. Therefore activity management is not effect to the financial performance of the organization.

C. Considering the all answers, it can be identifying there are positive impact of relationship management on financial performance of the organization. Through the relationship management below advantages can be achieve to any organization. **Reduced costs**, there are usually some significant costs involved in setting up deals with new suppliers, but a supplier relationship management programme can eliminate many of those costs. By co-operating in a mutually beneficial relationship with key suppliers, a company can strive for cost savings over the long term. Good working relationships with suppliers will not only deliver cost savings, but also they will reduce availability problems, delays and quality issues and that means a better service for the customer. **Increased efficiency**, as a defined and establish supplier relationship develops, communication improves. Suppliers gain more complete understanding of the businesses they serve and this allows them to meet their needs more effectively. Delays in the supply chain will decrease and the flow of operations will greatly improve. And when issues in the ordering process do arise, the healthy working relationship between supplier and client will make such issues easier to resolve. **Minimises price instability** continues price fluctuation is the one of major problem in purchasing. In some situations, these fluctuations are act as a direct result of increased volatility of commodity prices. However, by adopting the principles of supplier relationship management, companies can often take advantage of fixed pricing or scaled increases in exchange for lengthier contract terms, minimum order levels or various other qualifying criteria. Having a clear and unambiguous cost base allows a business to set its own pricing structures with some certainty and that often translates to happier more loyal customers. Consolidation of the supply chain as specific areas of both the supplier's and buyer's business work together, this allows both parties to better understand the inner workings of the other. In some cases, both parties will be able to adapt their own working practices and operations to better accommodate the other and that can lead to further efficiencies and operational advantages. The consolidation of the supply chain may allow buyers to reduce the number of suppliers they purchase from - streamlining the purchasing process and making budgeting a far simpler task. **Activity**

**management certain activities** a successful supplier relationship management programme will often create a trusting partnership between the buyer and supplier. In some cases, this may result in many key activities being transferred to the supplier on a permanent basis. This may include entrusting a supplier with the management of inventory levels and some elements of customer service. Continual improvement of operations.

A long-term relationship between supplier and buyer allows for the free-flow of feedback and ideas. Relationship management create a more streamlined, effective supply chain that could have a positive impact on both costs and customer service. The areas of product development, instigating new ordering processes and inventory control can become a joint venture and that can deliver a range of financial and operational benefits to both parties. Working together with its suppliers, a company can tailor its supply chain to meet its individual needs. Processes can be consolidated, costs can be reduced and the end product for the consumer can be improved. Through a combination savings and efficiencies, companies can create a healthier bottom line despite underlying weakness in their sector. Relationship management effect to health care sector financial position same as other sectors. Because buyer supplier relationship of health care sector most similar to other sectors.

Laboratory section is very sensitive area in each hospital. To cater the better service and capture the market, laboratory test price should be less and service should be standard. Otherwise it's difficult to face market competition and difficult to achieve the target budget. Due to the relationship management, organization can get competitive prices for reagents and can get quality goods for low cost. According to the literature win-win strategy has been advocated to improve overall supply chain performance of the organization. According to the relationship management buyer and supplier can be work together, can be discuss the matters openly and it helps to develop the knowledge of the industry on both parties and helps to run the negotiations and other contract discussion smoothly. As per interviewees, relationship management very powerful tool in healthcare sector procurement also.

E. It was found in the study there are positive impact of managing quality on financial performance of the organization. Through the quality management following benefits can be achieve. Greater efficiency and less waste, better and consistent control of major business processes, a better understanding of customer

needs, regulation of successful working practices, improved risk management, increased customer satisfaction, improved participation of employees, better internal communication, greater consistency in the quality of products and services, differentiation of business from its competitors, increased profits, reduction of costly errors, exploitation of new markets both local and overseas, managing growth more effectively and embedded the culture of quality.

Above advantages can be achieved through the quality management for any organization. Through the quality management above mentioned advantages can be achieved to any organization. For an example, quality of purchasing procedures brings all activities smooth and standard. Positively it's directly effect to organization cash flow. As well as, interviewee's totally agreed that whitening the laboratory activities can avoid waste from considerable amount. As an example, due to quality management, reagent usage can be control and can get quality consumables for laboratory operations. With the control of reagents and quality consumables, laboratory department save the money for organization. As per the literature quality management an integrated management approach that aims to continuously improve the performance of products, processes and services to achieve and surpass customer expectations. After considering all these factors can imagine that the quality management effect to financial performance of the organization positively.

It was found in the study, there are positive impact of negotiation on financial performance of the organization. Each and every sector, specially manufacturing and services, negotiation is the key function can effect to organization cash flow directly. To buy the materials or related goods and services, organizations spend more than fifty percent from their annual income. With that situation supply chain department has a huge responsibility to spend those money correctly. Using negotiation as a tool, organization can save millions of money during the purchasing process. For an example, ABC hospital chain purchased a new MRI machine to the radiology department. As a result of negotiation, supplier agreed to provide one million worth MRI service package to other ABC hospital free of charge. ABC group use negotiation as a key performance measurement for measure the supply chain executive's performance. Because top management knows, impotency of the negotiation and how it's help to save the millions of money yearly. Every year all three ABC hospitals save nearly fifty millions through the negotiations. Considering above fact and Figures, it is clear that there

are huge impact of negotiation on financial performance of the organization.

## **V. CONCLUSION**

Impact of time compression on financial performance of the organization is very low. Time compression is important to the organization under the areas such as, flexibility during rapid changes in the market, the ability to outpace company competitors with faster, more efficient output, quicker replenishment of stock to avoid stock outs, lost sales and lost customers, meeting deadlines consistently and easily, increases in cash flow because of increased order fulfilment. Other sectors, able to achieve above mentioned time compression positive factors to smooth the operation and improve to the financial performance. But in hospital sector, time compression is not effect to the financial performance. Generally activity management help to achieve cost advantages, increased efficiency, focus on core areas and save on infrastructure and technology. Activity management eliminates the needs for investments in infrastructure as the activity management partner takes the responsibility of the business processes and hence develops infrastructure for the same. In hospital sector activity management not effect to the financial performance of the organization due to core activities cannot be outsourcing in hospital sector. Through the relationship management following advantages can be achieved to any organization. Reduced costs, increased efficiency, minimises price instability and activity management. A long-term relationship between supplier and buyer allows for the free-flow of feedback and ideas. Relationship management create a more streamlined, effective supply chain that could have a positive impact on both costs and customer service. There are positive impact of managing quality on financial performance of the organization. Greater efficiency and less waste, better and consistent control of major business processes, a better understanding of customer needs, regulation of successful working practices, improved risk management, increased customer satisfaction, improved participation of employees, better internal communication, greater consistency in the quality of products and services, increased profits, reduction of costly errors, exploitation of new markets, both local and overseas, managing growth more effectively, an embedded culture of quality.

Through the negotiation management, organization has earned a lot of opportunities to save the expenditures and managing the future contract. According to the negotiation saving chart, supply chain officers have

saved millions of money through the negotiation management.

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