

Impact of Disintermediation Towards Competitive Advantage of Supermarket Supply chain in Sri Lanka

(With Special Reference to the Supermarkets Located in Colombo District Sri Lanka)

Ms. K.J.K. Fernando¹

¹Graduate, University of Kelaniya, Sri Lanka

Abstract: Disintermediation is the removal of the third party that provides intermediate services between two parties in a supply chain. It means “cutting out the middleman” from the channel permitting direct links between consumers and sellers. In the past, the supermarkets purchased goods from retailers, but nowadays they directly purchase from the initial producer. The primary objective of this study is to explore how the disintermediation is related to obtain competitive advantage by supermarket chains in Sri Lanka. In order to examine this, we used three independent variables which are cost reduction, value improving and social impact while using disintermediation as the mediating variable and competitive advantage as the dependent variable. The most influencing factor that leads the supermarkets to adapt disintermediation practices is being identified and analyzed through this study. Even though there are many benefits obtained, by removing intermediary parties in the supply chain, yet there are several practical issues found when it comes to the implementation of this concept in the supermarket chain. Quantitative study has been done to achieve the research objectives. At first the researcher carried out a pilot test with the use of 20 supermarket managers in the Colombo District to make sure the questionnaire comprises of relevant questions. Out of 119 respondents, 105 respondents were taken into account after removing the outliers by running a thorough analysis. As the major finding, it was found that social impact has the highest influence towards disintermediation on competitive advantage. Further, disintermediation can be recommended for supermarkets as an efficient and effective practice to adapt with the modern market conditions which has many benefits towards the stakeholders in achieving competitive advantage in the industry.

Key Words: *Competitive Advantage, Cost Reduction, Disintermediation, Social Impact, Value Improving.*

I. INTRODUCTION

Today, the supermarket industry is at the growing stage of its industry life cycle due to the westernized modern lifestyles of Sri Lankans. There are around 600 supermarket outlets in Sri Lanka which is dominated by the major supermarket chains of Cargills Food City, Keells Super, Arpico Super and Laugfs as private sector entities while Lanka Sathosa as a state-owned entity (Fitch Ratings Ltd, 2017). The supply chain consists of manufacturers, wholesalers, distributors, and customers.

Disintermediation eliminates the position of middlemen between producers and avoids conventional distribution channels with intermediates such as distributors, dealers, brokers or agents. In the case of disintermediation, one step is removed, e.g., the manufacturer goes directly to the customer, thereby removing the need for the wholesaler. Simplified, business goes in direct to the consumers, although the elimination of any single point within the supply chain can make the process more transparent and straightforward. (Nichol, 2016) Companies and producers can deal directly with consumers or end-users, which is a key factor in reducing customer service costs. Almost every internationally diversified industry shares a common goal. This is done in order to increase profitability, primarily through reducing expenses. Market share improvement is also considered.

Previous research identified procuring as one of the key logistical activities in which practitioners could increase profits by leveraging costs. High market visibility also allows customers to pay less as they deal

directly with the supplier, bypassing the entire distributor and the retailer. Additionally in another way consumers can also purchase directly from wholesalers. Supermarket industries around the globe therefore regarding sourcing as one of the best tactics to achieve this goal. As a consequence, sourcing is a critical factor, especially in food supply chains, and is to be seen as an important function of the company. The word "Sourcing" is used to describe the process of supplying higher quality goods and services across the standard geographic boundaries of the state. Sourcing also seeks to leverage efficiencies such as low-cost raw materials, low-cost skilled labor and other economic factors, including deals on import and export tariffs and taxes. (Cooper, et al., 1997) The traditional supermarket supply chain involves middlemen moving fruits and vegetables from farmers to consumers, resulting in inefficiencies and quality difficulties along the supply chain. As a result, large retailers, such as supermarkets, have begun purchasing directly from farmers without the use of intermediaries in order to reduce costs and delays while maintaining the quality of vegetables and fruit. This research focuses on how to overcome those problems by disintermediation on supermarket industry. To eliminate middlemen in the supply chain, it is necessary to determine the factors that affect supermarkets.

According to previous literature, those factors are cost reduction, value improving, social impact, and performance level on competitive advantage. By conducting this research, the most influencing factor that influencing on disintermediation is being scientifically identified & analyzed.

A. Cost Reduction

Cost reduction is the process of using new and improved approaches to reduce the unit cost of the company's products and services without sacrificing their performance or suitability for the projected use. Many businesses use it to reduce the non-essential costs of goods produced only to boost overall profits in a systematic and preventive manner. There are several intermediaries engaging in the supermarket industry all across the supply chain. They incur various kinds of costs for their added value. Such costs may be removed or further minimized by disintermediation. (Davies & Brito, 1996) Cost

reduction can be accomplished by incorporating these factors. Nonetheless, it is a bit difficult to see the efforts made by each variable to the overall cost savings. (Hertz, et al., 2001) The supply chain effectively manages costs by maximizing asset utilization through disintermediation, which can result in a competitive advantage through lower market prices for goods or increased consumer benefits at the same cost level.

General costs such as manufacturing costs, operation costs, raw material acquisition prices, processing costs, shipment costs, and distribution costs all considerably decrease after the removal of third parties from the supply chain. Therefore, the company can offer its goods to the purchaser at competitive prices. (Bernard, et al.,1996) Buyers get prices benefit from the reduced cost of the manufacturer due to disintermediation and also take into account the quality and performance of the supplier.

B. Value Improving

Value Chain Management (VCM) is an improvement in overall performance that involves methodically examining each connection or node in the entire food supply chain to see how the overall speed, cost effectiveness, and reliability can be improved. McGuffog (2007) All stakeholders in the value chain would benefit from a shared understanding of how well the supply chain works best and from the common good practice to promote the most successful implementation. This commonly held view would encourage more mutual cooperation between value chain parties than would have otherwise occurred in a normal competitive market.

Another way to think of VCM is to consider all potential strategies to increase net value. Identification and evaluation of all connections and processes, both internal and external, that can be enhanced for efficiency and consistency to reduce costs and improve overall performance or product. They should be handled in a constant and consistent manner. Otherwise, the gains will not be known. The supermarket industry can benefit from applying the value chain management principles.

Supermarkets are introducing products and services under their own labels in the modern world. The term "own-label" brands, sometimes known as "personal

brands," "store brands," "retailer brands," or "home brands," refers to consumer goods produced by or at the direction of distributors and offered for sale via the distributor's own outlet under the distributor's own name or trademark. (EIU for Business, 1968) Supermarkets have created premium lines under their own brands that are targeted at higher socioeconomic classes. (Mason & Kleinman, 2002) In order to ensure that all cost savings are passed on to the Customer, all of their products have a standard design and plain, clear packaging. All of their products come from renowned suppliers in Sri Lanka and abroad and through strict quality checks, they always work to keep their brand promise to treat their customers as their most valuable asset. (Samarasinghe & Kuruppu, 2017).

C. Social Impact

The retail sector has shown a significant improvement over the last few years and is still evolving due to global demand, short product life cycle, outsourcing of non-core operations and time contraction at all stages of the supply chain. (Skjøtt-Larsen, et al., 2007) The corporate business world as well as academia are currently paying more attention to concepts like supply chain sustainability (Dyllick & Hockerts, 2002) triple bottom line (Elkington, 1997), environmental management (Handfield, et al., 2005), corporate greening (Preuss, 2005), green supply (Bowen, et al., 2001) and corporate social responsibility (CSR) in supply chains (Pedersen & Andersen, 2006) Nowadays, customers and consumers are becoming more and more concerned with the social and environmental implications of production and consumption. Due to this, businesses are becoming more interested in issues relating to sustainable supply chains, greener supply chains, and reverse logistics.

Many supermarket chains have adopted frameworks called "greener supply chains" and "sustainable supply chains" that represent the whole ecological footprint of the supply chain on resources. The supply chain can be made more environmentally friendly and save money by avoiding or reducing waste to gain a competitive advantage (Porter & Linde, 1995) Corporate Social Responsibility (CSR) is a well-known concept, not limited to supermarket chains, but to the business as a whole, whose treatment of human beings and the environment. Different conceptions of

the responsibilities of businesses towards ethical issues have been offered by academics, commentators, and corporate executives. Other values besides CSR include the triple bottom line, corporate citizenship, sustainable development, and responsible entrepreneurship. (Marrewijk, 2003).

CSR consequently considerably includes the entire supply chain and is no longer the realm of individual businesses. For instance, multinational corporations are expected to act responsibly both inside and outside of their respective legal boundaries. In terms of labor and environmental practices, they also have obligations to their international business partners, including distributors, third-party logistics providers, and intermediaries over which they have no ownership. (Jenkins, et al., 2002).

D. Competitive Advantage

The true purpose of supply chain management is to reduce expenditure while increasing a competitive advantage without sacrificing customer satisfaction. (Lee & Billington, 1992) Each step of supply which have their own distinct set of goals, activities related to and efforts which are duplicated can be minimized by disintermediation. Supermarkets freely share information with customers as a manner of advertising their capacity to work with customers to meet their needs. The strategies to be used are coordination, simultaneous procurement, long-term requirements planning, teaming provisions, commodity/component approaches, industry collaboration, and staff development.

SCM must concentrate on utilizing the skills, assets, and capabilities of the businesses that make up this strategic network because cutting out middlemen often leads to reduce prices. Supermarket managers have recognized how important it is to get closer to their main consumer. So, they can understand the needs and desires of the consumers and what they are actually looking for. The relevant upgrades can then be made to accommodate the customer's needs. This reasoning has also been applied downstream, and it is also important to forge close ties with one of the main suppliers. (Helper, 1991) After disintermediation, a supply chain strategy needs to be developed by recognizing the key elements sourcing process, internally and externally generated knowledge flows,

new product management, parallel procurement, partnering arrangements, commodity / component approaches, long-term demand planning, business collaboration, and staff creation.

II. METHODOLOGY

Research design

The main purpose of this study is to know the impact of disintermediation towards the competitive advantage of the supermarket chain. With the nature of the objective, the current study has an explanatory purpose. “Exploratory study is to figure out what is going on while figure out something fresh which was not found previously” (Sekaran, U. & Bougie, R., 2010). When it comes to the current study, characteristics of the research objective, research approach and research choice have more tended towards the explanatory way. The researcher has adopted a deductive research approach considering the nature of the current research. According to the current study a deductive research approach with a quantitative method has been used to examine the relationship of variables. Research theory and hypothesis are developed and tested due to positivism approach. with the nature of the current investigation, has obediently chosen to investigate through a causal method instead correlation method because "a causal study explores one or more variables' effect change in another variable. Since the current study examines the effects of disintermediation towards the competitive advantage. As a result, it is possible to establish a causal relationship between the two variables, making this a causal study. The quantitative approach was chosen for the current study since it was the most effective strategy to carry out the research with the support of existing literature. In this research the target population comprises of the supermarkets in Colombo District. The target population is identified as supermarkets managers. Considering the topic of the research, it has been narrowed down to Moratuwa, Piliyandala, Mt Lavinia, Ratmalana, Dehiwala, Wellawatta, Bambalapitiya, Kollupitiya, Rajagiriya, Borella, Battaramulla, Nugegoda, Maharagama areas. The sample size consists of 105 supermarket managers. The Current study is focusing on non-probability sampling because sample members are chosen deliberately by the researcher and the probability of selection is not known as well as there

is no equal opportunity for the impact of disintermediation towards competitive advantage of every supermarket. Moreover, with the support of previous literature, to bring practicability while evaluating cost and time effectiveness qualities the researcher has identified the most reliable sampling technique as a non-probability sampling technique for further continue this study. The researcher engages primary data sources. This research was conducted based on a questionnaire which included only close ended questions. The questionnaire would be distributed among the selected sample base on the supermarket managers.

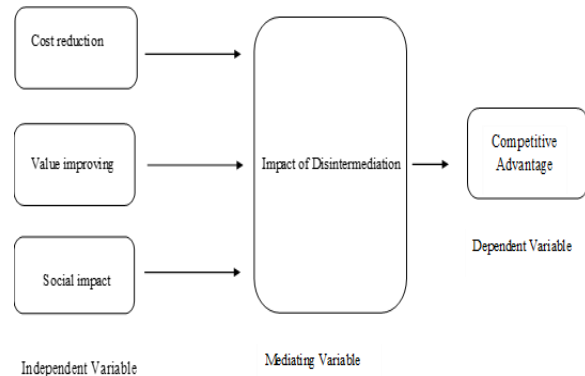


Figure 01 – Conceptual Framework

Hypothesis of study

- H1 - There is an impact of cost reduction on disintermediation towards competitive advantage.
- H2 - There is an impact of value improving on disintermediation towards competitive advantage.
- H3 - There is an impact of social impact on disintermediation towards competitive advantage.
- H4 - There is an impact of cost reduction, value improving and social impact on competitive advantage through disintermediation.

Data Analysis Method

With the available information and findings, the researcher has determined to use the quantitative data analysis method as the most suitable method for current study. Correlation and multiple regression measures are used to analyze data. With the support of the previous study, the data gathered are statistically analyzed through “SPSS” software which is widely used computer software for quantitative data analysis to see whether developed hypotheses have been supported. Furthermore, to analyze the data descriptive statistic is used to generate more

summarized explanations regarding observed data, and inferential statistic is used to determine the impact level of disintermediation towards competitive advantage.

Results

During the study it has revealed that Cost reduction and value creation does not much impact to the competitive advantage. Social impact has the highest positive impact on Competitive Advantage which has a high correlation of 0.629. The findings that were interpreted in the fourth chapter shows a linear relationship with a significant value of (p<0.05) and a confidence level of 95%. Therefore, it can be concluded that social impact has a high impact on disintermediation towards competitive advantage. Based on the study, cost reduction has impact to the mediating and dependent variable. The findings that were interpreted in the fourth chapter shows a linear relationship with a significant value of (p<0.05) and a confidence level of 95%. Therefore, it can be concluded that cost reduction has a positive impact on disintermediation towards competitive advantage. The Beta “B” value of the cost reduction with the available outcome the researcher has to accept the hypothesis because it is P value is 0.05 which is equal to 0.05.

The findings that were interpreted in the fourth chapter shows a linear relationship with a significant value of (p<0.05) and a confidence level of 95%. Therefore, it can be concluded that Value impact does not have a positive impact on disintermediation towards competitive advantage. The Beta “B” value of the value improving with the available outcome the researcher must reject the hypothesis because the P value is 0.269 which is greater than 0.05. According to the findings, there is an impact of the mediating variable towards the independent and dependent variables which was proven by multiple regression in the data analysis chapter. When the disintermediation towards competitive advantage is discovered in the regression analysis the significance of the other variables reduced by increasing the significance of disintermediation (P<0.05). Furthermore, when discussing about the Sobel test all independent variables were accepted by the mediate variable. As a result, cost reduction has 0.05, value improving has 0.269 and social impact has 0.045 respectively at 95% confidence level. Among them it can be concluded that

social impact has a higher influence on disintermediation towards competitive advantage. Finally, with the use of the data analysis it was proven that the social impact has the highest influence on the disintermediation.

Pearson correlation coefficient tends toward the -1, it can be reorganized as perfect negative correlation exists between the variables on the other hand perfect positive relationship can be identified if the person correlation is +1. Furthermore, if the person correlation is 0, it indicates there is no correlation. Moreover (Cohen, 1992) documented that if the (Significance) $r > 0.5$, then there is strong correlation exists and if $0.3 < r < 0.5$ it specifies the moderate correlation while $0.1 < r < 0.3$ implies that there is small correlation exists. Considering to the available analysis data the “r” (significance) value of the cost reduction has recorded the value as 0.505 that suggests there is strong correlation exists between the cost reduction and competitive advantage. Moreover, the highest “r” value belongs to the disintermediation aspect as a 0.681. Following to the cost reduction aspect value improving and social impact also have highest “r” values. Therefore, the researcher can verify that overall model independent variables and mediating variable backed up with the strong correlation with the dependent variable.

Variable		Competitive Advantage
Cost Reduction	Pearson correlation Sig. (2 tailed) N	.505 .000 100
Value Improving	Pearson correlation Sig. (2 tailed) N	.607 .000 100
Social Impact	Pearson correlation Sig. (2 tailed) N	.629 .000 100
Disintermediation	Pearson correlation Sig. (2 tailed) N	0.681 .000 100

Table 01 - Correlation Analysis

According to the computation “R” value of the current study was 0.724. Therefore, researcher able to conclude that there is moderate positive relationship exists between the dependent and independent variables. moreover, “R Square” is a measure of how

much the dependent variable has changed or effect by togetherness of independent variables. “R Square” value of the current study was 52.4% and the researcher can further conclude that through the selected model variable of the current study which include the cost reduction, value improving and social impact show 52.4 % variance towards competitive advantage while rest of the 47.6% variance of competitive advantage is described by the other variables that are not address in the current study.

Model	Unstandardized coefficient	Standardized coefficient	
Independent variable	B	Beta	Sig. (P value)
Cost Reduction	.182	.164	.050
Value Improving	.125	.123	.269
Social Impact	.192	.160	.045
Disintermediation	.435	.389	.001

Table 02 - Coefficient of Independent Variables

Model	Unstandardized Coefficients		Standardized coefficients	t	Sig
	B	Std. error			
Disintermediation	.747	.368	.675	2.030	.045
	.812	.087		9.283	.000

Table 03 - Coefficient of mediating variable

Model	Unstandardized Coefficients		Standardized coefficients	t	Sig
	B	Std. error			
Cost Reduction	.159	.094	.147	1.695	.093
Value Improving	.263	.097	.259	2.700	.008
Social Impact	.476	.127	.380	3.751	.000

Table 04 - Coefficient of mediating variable and independent variables

Key Findings

The major finding of this research is the correlation between disintermediation and social impact which highly affects disintermediation because of their CSR programs. The reason for this is that in the 21st century companies think of their social responsibility, and they are moving towards it to help each other.

Nowadays, customers and consumers are increasingly concerned about the social and environmental effects of production and consumption. Based on this study, it

is a possible to recommend the supermarket companies to enhance the social impacts in order to get Competitive Advantage. Supermarket chains can renew their interest in matters related to greener supply chains, reverse logistics, environmental conservation, and management. Furthermore, the companies can think of practices such as corporate social responsibility (CSR), supply chain sustainability, triple bottom line, business ethics, corporate citizenship and sustainable entrepreneurship in supply chains which are currently receiving an amplifying attention in corporate business world.

III. CONCLUSION

Through this research the researchers have found out the impact of disintermediation towards competitive advantage with special reference to the supermarket chain in Sri Lanka. This study focuses on how decision impacts on Competitive Advantage by considering the three independent variables namely cost reduction, value improving and social impact. During the study it has revealed that Cost reduction and value creation does not much impact to the competitive advantage. Social impact has the highest positive impact on Competitive Advantage which has a high correlation of 0.629.

Nowadays, customers and consumers are increasingly concerned about the social and environmental effects of production and consumption. Based on this study, it is a possible to recommend the supermarket companies to enhance the social impacts to get Competitive Advantage. Supermarket chains can renew their interest in matters related to greener supply chains, reverse logistics, environmental conservation, and management. Furthermore, the companies can think of practices such as corporate social responsibility (CSR), supply chain sustainability, triple bottom line, business ethics, corporate citizenship and sustainable entrepreneurship in supply chains which are currently receiving an amplifying attention in corporate business world.

IV. IMPLICATIONS & RECOMMENDATIONS

Currently there is a limited number of supermarket chains in Sri Lanka, but a very large number of outlets

are located island wide. Therefore, disintermediation can easily be achieved by the supermarkets because of the high level of outlets. Statistically coefficient value and the R-square values suggests that there is a positive influence of social impact on the disintermediation towards competitive advantage. According to the records, there are limited number of research. Therefore, the result of the study helps the supermarket chain to identify the social impact of disintermediation towards Competitive Advantage.

Study of this research was done to identify the effect of disintermediation on competitive advantage with special reference to the supermarket chain in Sri Lanka. When discussing the hypotheses of this study, it was identified that there is a strongly positive influence of the social impact on disintermediation towards competitive advantage. Therefore, that hypothesis is clearly accepted. Sri Lanka is a developing country which is highly concerned about the social welfare and environmental friendliness. Likewise, the CSR programs and greening concept focuses on the external parties, welfare of the society and the wellbeing of the environment. Due to the lack of benefits supermarkets are moving towards the social impact as it is a win-win situation for both the parties which is recommended by this study. There are 2 recommendations of this study, Considering the study, it is possible to recommend the supermarket entities to be more focused on social and environmental effects of production and consumption. In order to enhance the social impacts, activities such as corporate social responsibility (CSR) can be put into practice which will benefit both the society and the entity in many ways.

Supermarket chains can embrace frameworks like greener supply chain and Sustainable supply chain that reflects the overall environmental footprint of the supply chain on resources and ecological footprints. Greening the supply chain can lead to many benefits, such as saving money by minimizing or reducing waste, while at the same time improving efficiency and achieving competitive advantage.

V. DIRECTION FOR THE FUTURE RESEARCH

The result of this research can be useful for the future researchers in adapting the concept of

disintermediation towards competitive advantage with special reference to the supermarkets. According to the recommendation, disintermediation affects the supermarket chain in Sri Lanka. When discussing about the sample of this research initially, 105 questionnaires were distributed and out of that only 100 were selected for the data analysis.

Future researchers may get a sample from supermarkets in rural areas and its customers. Furthermore, the future researchers need to identify how cost reduction and value improving factors affect disintermediation on the supermarket chain in Sri Lanka. Moreover, the future researchers will be able to replicate in another context in different location and people's income level.

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ABBREVIATIONS

- SCM Supply Chain Management
CSR Cooperate Social Responsibility