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**A proposed framework for the integration between Value Chain
Analysis and Outsourcing Decision to achieve Sustainable Competitive
Advantages with a Case Study**

إطار مقترح لإجراء التكامل بين تحليل سلسلة القيمة وقرار التعهيد بهدف تحقيق مزايا تنافسية مستدامة

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A proposed framework for the integration between Value Chain Analysis and Outsourcing Decision to achieve Sustainable Competitive Advantages with a Case Study

Abstract

Purpose – The purpose of this research is to illustrate how Outsourcing Decision should be carried out from a strategic perspective, this strategic perspective can be achieved through the integration of Value Chain Analysis (VCA) as a strategic cost management tool into the overall strategy of the organization. Then, this research aims at proposing a new framework to investigate the potential role of Value Chain Analysis in supporting Outsourcing Decision to achieve sustainable competitive advantages.

Methodology/Approach – The researcher used the constructive approach with a case study to conduct a proposed framework for the integration between Value Chain Analysis and Outsourcing Decision in the real world.

Research Scope – This study is applied on dairy industry specially DANONE company through a case study.

Importance – Scientific importance is represented in the possibility of making integration between Value Chain Analysis and Outsourcing Decision for maximization of customer value. Practical importance is presented in the role of this integration in improving the strategic orientation of firms and achieving sustainable competitive advantages.

Findings – The results of the scoring model demonstrate that outsourcing sources of dairy product packages has the greatest contribution to achieving sustainable competitive advantages.

Key Words: Value Chain Analysis, Outsourcing Decision, Sustainable Competitive Advantage, Scoring model.

1- Introduction

Creating and delivering sustainable value to all stakeholders, is the main goal of all businesses throughout the world so, researchers and managers have developed multiple tools and practices to enhance creation and delivery of value.

Value Chain Analysis is a way of analyzing how value is added in various activities, commonly inside an organizational context, through investigating the costs of these activities, and how they are organized (Rieple & Singh, 2010).

A firm using Value-Chain Analysis could reveal that certain of its value chain activities could be performed more profitably by other firms. The practice of choosing to have an outside firm that provide a basic service function is called outsourcing (Blocher et al., 2010, p.441).

Quantitatively, outsourcing an operation will free up the resources it uses.

Qualitatively, outsourcing can provide the expertise that a firm lack, transfer risk to a third party, and allow a firm to concentrate on its core competencies (Davis & Davis, 2014, p.462). Many organizations, on the other hand, are not attaining the desired benefits from outsourcing as outsourcing decisions are rarely taken with a fully strategic perspective (McIvor, 2000).

Then the purpose of the research is to illustrate how outsourcing decision should be carried out from a strategic perspective?

This strategic perspective can be achieved through the integration of VCA as a strategic management tool into the overall strategy of the organization.

2. Literature Review

The study of (Johns et al., (2016) filled a critical research vacuum in the area of assessing improvement projects, demonstrating that all stakeholders in the sector can benefit from adopting VCA as a guiding framework for developing solutions and as a basis for evaluating their effectiveness. In the study of (Soosay et al., 2012) Sustainable Value Chain Analysis may be utilized as a diagnostic tool to identify resource allocation and customer preferences misalignment, it is the first study to combine Value Chain Analysis and Life Cycle Analysis LCA into a single method to determine which activities provide value and how these activities impact greenhouse gas emissions at each level of the supply chain. According to Flanagan et al. (2018), in fields such as process technology development, procurement, inbound logistics, and marketing, firms are cooperating with their direct competitors. The study of (Eggert et al., 2017) investigated how different types of business service outsourcing affect the value of the firm. The impact of business service outsourcing announcements on typical outcomes of publicly traded European manufacturing enterprises is investigated in this paper using the event study approach. According to Zhang & Huang (2012), recent changes in the business climate have affected global manufacturing outsourcing in China, this study provides numerous significant contributions as it begins by identifying the typical obstacles of global industrial outsourcing in China, it examines the consequences of changes in the business environment, the implications of supply chains for theory and practice are examined, as well as many supply chain research prospects. (Bhagat et al., 2010) presented a comprehensive framework of strategic value that encompasses a wide range of critical aspects of the value creation and delivery process in transactions between businesses that outsource activities to internal or external service providers. The study of (Aktas& Ulengin, 2005) identified the current state of outsourcing logistics activities in Turkey, which has a lot of potential logistics activities among the surrounding continents due to its geographical location. The study of (Mechtcheriakova & Gurianova, 2015) attempts to apply M. Porter's chain of values to develop a firm's outsourcing strategy as a

goal of the real work. This approach provides an assessment of a firm's activity that is not isolated from the environment and takes the overall chain into account beginning with the resource supplier and ending with the end user. According to Mohammed et al. (2008), factor analysis is utilized to investigate the features of agile and lean value chains in order to show that outsourcing can be a crucial intervention in reaching the triple aim of flexibility, agility, and leanness, it also found that outsourcing activity procedures allows businesses to give greater value to their customers.

3.Theoretical Framework

3.1. Value Chain

The value chain is a list of activities that convert raw resources into commodities and services that end consumers purchase and use. It includes the treatment or elimination of any waste generated by end users (Lanen et al., 2013, p.4).

Types of Value Chains

- Firm's Value Chain
- Industrial Value Chain
- Total Value Chain (Overall Value Chain)

3.2. Value Chain Analysis

Value Chain Analysis is one of the three main pillars of Strategic cost management (Value Chain Analysis, Strategic Position Analysis, and Cost-Driver Analysis). VCA is a strategic analysis tool that is used to better understand the firm's competitive advantage, identify where value to customers can be increased, where costs can be decreased, and gain a better understanding of the firm's linkages with suppliers, customers, and other firms in the industry (Blocher et al., 2010, p.39).

3.2.1. Objectives of Value Chain Analysis

- 1- Determining the private costs and profitability of various stages in the value chain.
- 2- Understanding the cost composition.
- 3- Measuring trade competence (Jirawala, 2015).

3.2.2. The use of Value Chain Analysis (Jirawala, 2015):

- 1- Sources of the firm's competitive advantage can be seen in its discrete activities and how they communicate with each other.
- 2- A value chain is a tool for systematically analyzing a firm's activities and how they interact with and affect each other's cost and performance.
- 3- A firm gains a competitive advantage by performing these activities more efficiently or at a lower cost than competitors.
- 4- It assists in staying out of the "No Profit Zone".
- 5- Make integration opportunities available.
- 6- It helps in aligning spending with value-creation processes.
- 7- Value chain analysis is important because it helps in identifying which costs in the chain can be reduced or influenced by a change in one of the chain's processes.

3.3. Outsourcing Decision

3.3.1. Definition of outsourcing

The classical definition of outsourcing is obtaining a service on an ongoing basis for a transaction fee from an outside party (agent) who is not inside the client firm's managerial control/perimeter (Williams & Banerjee, 2009).

3.3.2 Dimensions that impact the outsourcing of a value-added function (Williams & Banerjee, 2009):

- An external source that has essential and relevant expertise.
- The capability to "ring fence" the specialized expertise gained from external party.
- The capacity to divide a portfolio of tasks that can be undertaken individually with minimum inter-team coordination.
- External environment stability in the international service provider domain.
- Possibility of gaining a cost advantage.

3.3.3. The main factors that affect the level of outsourcing

These factors are as follows:

- The expertise of the vendor.
- The environmental stability of the offshore domain.
- Physical constraints to outsourcing sophisticated corporate processes, such as communication challenges and worries about proximity.
- The risk of knowledge leakage from the outsourced domain.
- Outsourcing's cost advantages (Williams & Banerjee, 2009).

3.3.4. Advantages and disadvantages of outsourcing

(Gunasekaran et al., 2015; El-Helbawy, 1994) determined the advantages and disadvantages of outsourcing:

Advantages

Firms are support outsourcing decisions for a variety of reasons, including:

- Outsourcing reduces asset costs.
- The firm focuses on its core competencies to reduce production costs.
- Strategic flexibility.
- Access to new technology, external knowledge and experience.
- Lower administrative and overhead costs.
- Achieving quality improvements.

Disadvantages

Firms are opposing to outsourcing decisions for a variety of reasons, including:

- Integration difficulties.
- Loss of competitive advantage.
- Opportunistic behavior.
- Rising transaction and coordination costs.
- Innovation is limited, and procurement costs are higher.
- Costs associated with training programs required to improve the worker's technical ability.

3.3.5. Vertical integration strategy

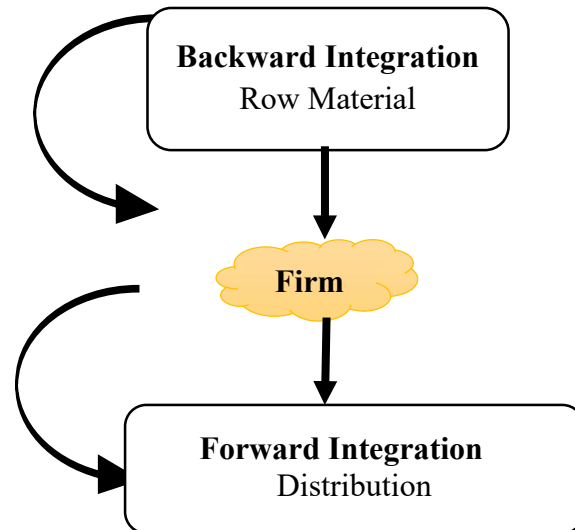
Is the opposite of Outsourcing Decision? (lane, 2007) It is considered one of the diversification strategies that firms adopt (El-Helbawy, 1994).

Vertical integration strategy (Sapir, 2022)

Vertical integration occurs when a firm plan to expand backwards or forwards within its existing value network, as well as directly to its own suppliers or distributors.

Backward integration occurs, for example, when a firm acquires its own components' suppliers rather than purchasing raw materials from contract manufacturers. According to business experts, when determining whether a firm should pursue vertical integration, the organization should consider the following criteria:

- Vertical integration requires a firm to anticipate massive sales volumes.
- A firm must have adequate large resources in terms of financial resources, personnel, manufacturing equipment, and technologies, along with intangible properties, to operate a vertical integration strategy.
- Suppliers' value chains must be aligned with the firm's value chains.



Vertical Integration Strategy
Source: by researcher

3.3.6. Determinants of the trade-off between insourcing and outsourcing decisions (El-Helbawy, 1994)

According to the strategic cost analysis approach these determinants should be dependent on improving the firm's competitive advantages; the relevant decision is one that will improve the firm's competitive advantage.

- First determinant: the controllability of cost drivers better than competitors, as the ability to control cost drivers better than competitors enhances the insourcing decision. The firm can accomplish differentiation associated with cost minimization strategy by accurately analyzing costs, revenues, and invested assets in each value-added activity through:
 - Minimizing the cost of value-added activity at the same level of revenues and invested assets in this activity.

- Maximizing revenues related to the value-added activity at the same level of costs and invested assets in this activity.
- Minimizing invested assets in value-added activities at the same level of costs and revenues.
- Second determinant: better rearrangement of the firm's value chain parts than competitors. To do that, the firm needs to ask about:
 - How does each value-added activity add to the value chain of a customer who uses products or services of the firm?
 - What is the result of the comparison between the cost structure of the firm and the cost structures of competitors?

3.4. The Integration between Value Chain Analysis and Outsourcing Decision

A proposed Framework for the integration between Value Chain Analysis and outsourcing decisions

The following figure provides a detailed summary of the outsourcing framework's steps through a decision tree. It consists of the following four stages:

Stage 1: Identifying the firm 's core activities

This stage entails identifying the firm's core and non-core activities, top management should lead the process of identifying the core activities, with participation from teams at lower levels of the firm.

Stage 2: Evaluate the relevant value chain activities

This stage examines the firm's competencies in these core activities in relationship with potential external sources. This entails a two-stage analysis:

- 1-All potential external suppliers' capabilities for each core activity must be benchmarked.
- 2- Making an attempt to determine and measure the costs of keeping the activity in-house vs outsourcing it.

Stage 3: Analysis of the total cost of core activities

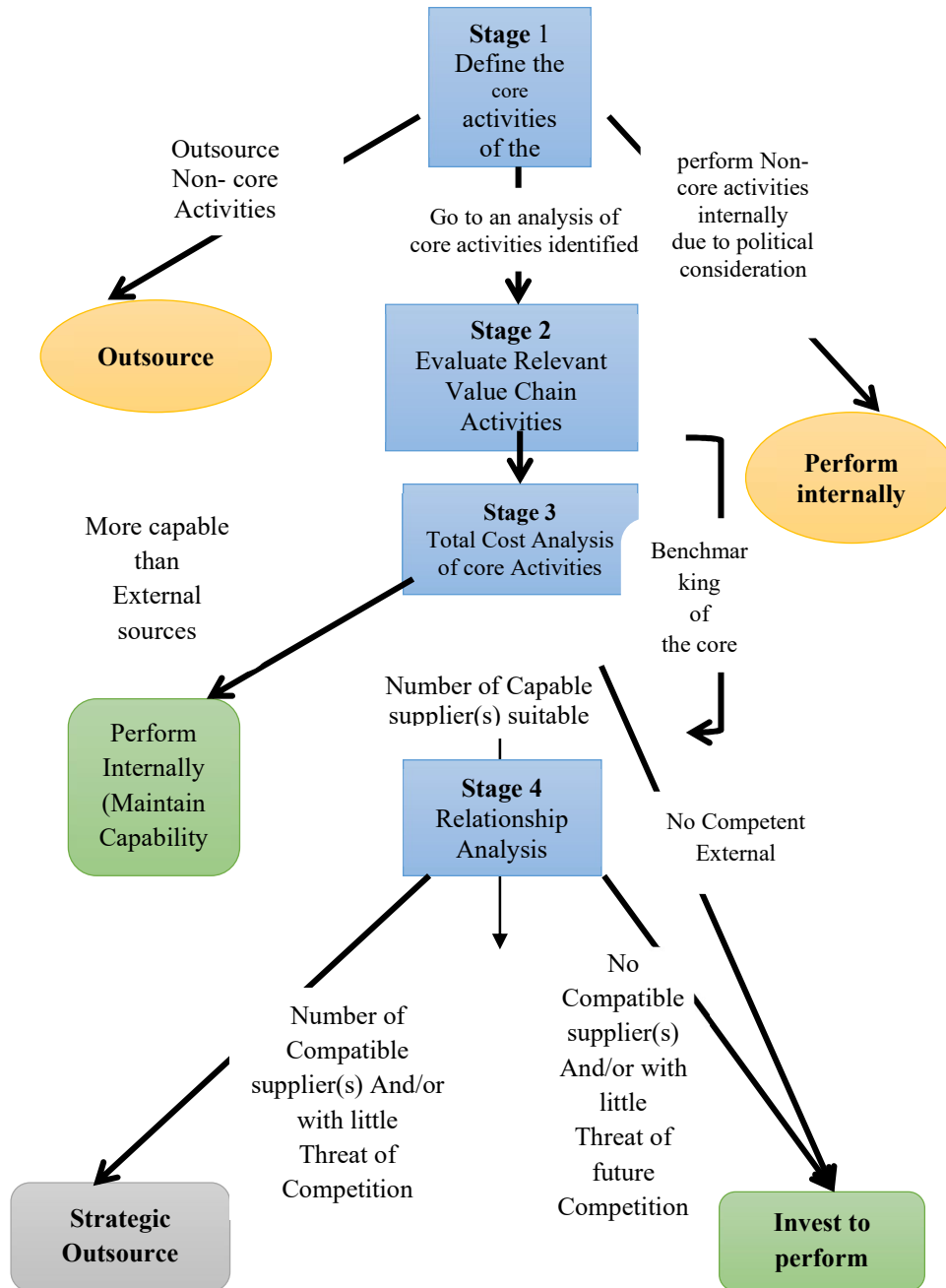
This stage comprises attempting to calculate all of the actual and anticipated costs related to the activity's sourcing (internally or externally).

There are two types of costs that have been recognized at this stage:

- 1- Cost estimation for conducting an internal activity.
- 2- Cost estimation for potential suppliers.

Stage 4: Relationship Analysis.

A firm may prefer to retain the knowledge which enables the activity's technology to be utilized, even if it is offered by another partner. As a result, it must maintain control over new product development and design in order to sustain future growth. To take advantage of a supplier's capabilities, the firm may form a strategic alliance or form a partnership.



A practical framework for evaluating the Outsourcing

4. Case Study

4.1. Unit of Analysis: DANONE Company

4.2. Methods of data collection

In this case study, the researcher collected data through interviews and questionnaire statements.

4.3. Method of Analysis

In this case study, the researcher analyzed data through the scoring model which is a simple and effective way to get the optimum decision alternative for a multi-criteria decision problem by assessing the trade-offs between these criteria.

The steps needed to establish a scoring model are as follows:

Step 1: Create a list of the appropriate criteria that will be used to evaluate each decision alternative.

Step 2: Add a weight to each criterion that explains its relative importance in achieving the main goal.

Step 3: Assign a rating for each criteria that demonstrates how well each decision alternative satisfies the criteria.

Step 4: Calculate the score for each decision alternative that identifies the contribution of each decision alternative in achieving the main goal of the multi-criteria decision problem.

Step 5: order the decision alternatives from highest to lowest score to provide a ranking of decision alternatives based on their contribution to the primary objective.

4.4. Data Analysis

In this study, the primary objective is to achieve sustainable competitive advantages. The aim is to determine and rank which decision will win and dominate in order to achieve sustainable competitive advantages. Thus, the researcher considers Insourcing/Outsourcing (Sources of milk), Insourcing/Outsourcing (Sources of dairy products packages) and Insourcing/Outsourcing (Marketing of dairy products), to be the decision alternatives of the scoring model.

In addition, the researcher considers six determinants of achieving sustainable competitive advantages to be the relevant criteria for evaluating the decision alternatives. Consequently, the five steps of the scoring model can be run next.

Step (1): Developing Criteria to Evaluate Decision Alternatives

The criteria considered by the researcher in evaluating decision alternatives are as follows:

- 1- Cost reduction across the overall Value Chain.
- 2- Increasing the rate of money generation across the overall value chain.
- 3- Quality improving across the overall value chain.
- 4- Focusing on the main sources of value creation.
- 5- Achieving strategic alignment.
- 6- Keeping industry secrets.

Step (2): Assigning Weights to Determinants of Achieving Sustainable Competitive Advantages

The researcher uses a five-point scale to assign a weight to each determinant of achieving sustainable competitive advantages that describes its relative importance to the main objective of achieving sustainable competitive advantages.

Table 4.1 summarizes the weights of each criterion.

Criteria (Determinants of achieving sustainable competitive advantages)	Weight (%)	
	Cost Reduction across overall value chain.	W1
Increasing the rate of money generation across overall value chain	W2	16.54
Quality Improving across overall value chain	W3	16.83
Focusing on the main sources of value creation	W4	16.69
Achieving strategic alignment	W5	17.41
Keeping industry secrets	W6	17.85
	Σw_i	100%

Step (3): Assigning Ratings for Determinants of Achieving Sustainable Competitive Advantages

The researcher uses a five-point scale to assign a rating to each determinant of achieving sustainable competitive advantages, which shows how well each decision alternative satisfies each determinant.

Table 4.2: Summary of the Ratings for Combinations of Criteria and Decision Alternatives.

Criteria	Decision Alternatives		
	Insourcing/ Outsourcing (Sources of milk)	Insourcing/ Outsourcing (Sources of Dairy product packages)	Insourcing/ Outsourcing (Marketing of dairy products)
Cost Reduction across overall value chain.	3.815	4.037	3.889
Increasing the rate of money generation across overall value chain	4.111	4.222	4.111
Quality Improving across overall value chain	4.333	4.444	4.222
Focusing on the main sources of value creation	4.407	4.481	4.333
Achieving strategic alignment	4.222	4.481	4.148
Keeping industry secrets	4.370	4.481	4.370

Step (4): Computing the score for each Decision Alternative**Table 4.3 illustrates Computing the Score of Each Decision Alternative**

Criteria	Decision Alternatives		
	Insourcing/ Outsourcing (Sources of milk)	Insourcing/ Outsourcing (Sources of Dairy product packages)	Insourcing/ Outsourcing (Marketing of dairy products)
Cost Reduction across overall value chain.	0.560	0.592	0.570
Increasing the rate of money generation across overall value chain	0.680	0.698	0.680
Quality Improving across overall value chain	0.729	0.748	0.711
Focusing on the main sources of value creation	0.736	0.748	0.723
Achieving strategic alignment	0.735	0.780	0.722
Keeping industry secrets	0.780	0.8	0.780
Score(s _j)	4.22	4.366	4.186

4.5. Results of scoring Model

4.5.1. Ranking determinants of achieving sustainable competitive advantages

In the first step of running the scoring model, a weight is assigned to each criterion to identify its importance or contribution to achieving the main goal. According to the responses of the respondents, the six determinants of achieving sustainable competitive advantages are ranked, according to their weights, as follows:

- Keeping industry secrets, weighted 17.85 %.
- Achieving strategic alignment, weighted 17.41%.
- Quality improving across overall value chain weighted 16.83 %.
- Focusing on the main sources of value creation, weighted 16.69 %.
- Increasing the rate of money generation across overall value chain weighted 16.54 %.
- Cost Reduction across overall value chain weighted 14.66 %.

4.5.2. Rating Combinations of Determinants of achieving sustainable competitive advantages and decision variables

Each rating shows how well each determinant of achieving sustainable competitive advantages is satisfied by each decision variable, as follows:

- 1- Cost Reduction across overall value chain: is highly satisfied by outsourcing sources of dairy product packages (4.037), compared to the average satisfaction of outsourcing marketing of dairy products and outsourcing sources of milk (3.889&3.815) respectively.
- 2- Increasing the rate of money generation across the overall value chain: is highly satisfied by Outsourcing sources of dairy product packages (4.222), compared to equal average satisfaction for outsourcing marketing of dairy products (4.111) and outsourcing sources of milk (4.111).
- 3- Quality Improving across overall value chain: is highly satisfied by outsourcing sources of dairy product packages (4.444), compared to

the average satisfaction of outsourcing sources of milk and outsourcing marketing of dairy products (4.333&4.222) respectively.

4- Focusing on the main sources of value creation: is highly satisfied by outsourcing sources of dairy product packages (4.481), compared to average satisfaction of outsourcing sources of milk, and outsourcing marketing of dairy products (4.407&4.333) respectively.

5- Achieving strategic alignment: is highly satisfied by outsourcing sources of dairy product packages (4.481), compared to the average satisfaction of outsourcing sources of milk and outsourcing marketing of dairy products (4.222 & 4.148) respectively.

6- Keeping industry secrets is highly satisfied with outsourcing sources of dairy product packages (4.481), compared to equal average satisfaction with outsourcing marketing of dairy products (4.370) and outsourcing sources of milk (4.370).

4.5.3. Scoring of decision alternatives

The highest score refers to the more dominant decision alternative that contributes to achieving sustainable competitive advantages. It is concluded that:

- The score of outsourcing sources of dairy product packages (4.366) refers to the high contribution of this decision alternative in achieving sustainable competitive advantages.
- The score of outsourcing sources of milk (4.22) refers to the fair contribution of this decision alternative in achieving sustainable competitive advantages.
- The score of outsourcing marketing of dairy products (4.186) refers to the lower contribution of this decision alternative in achieving sustainable competitive advantages.

5. Conclusion, Recommendations and Suggestions for future research

5.1. Conclusion:

In light of the rapid technological development, managerial accounting faced a difficult challenge represented in adapting its tools and methods to go in line with that development, in order to provide the decision makers with accurate information that has all the qualitative characteristics of information. Therefore, researchers must unify their efforts to help businesses survive in a business environment characterized by dynamic change.

From this perspective, this study sheds light on a very important research gap represented in the impact of the integration between Value Chain Analysis and Outsourcing Decision on achieving sustainable competitive advantages, by identifying the interrelationship between value chain analysis and outsourcing/outsourcing decisions, and what is the impact of integration on maximizing customer value at a lower cost.

The researcher explained the difference between the concept of added value and the concept of value chain, and how Value-added concept causes misleading. The research also reviewed trends in cost accounting across the value chain which has been theoretically rooted as one of the strategically oriented management accounting tools.

The research presented a proposed framework for integrating value chain analysis and outsourcing decision to achieve sustainable competitive advantages.

The research relied on a constructive approach as form of problem solving approach with a case study to conduct a proposed framework for integrating value chain analysis and outsourcing decision in the real world.

The result reveals by using scoring model represented the six determinants of achieving sustainable competitive advantages are ranked, according to their weights, as follows:

- Keeping industry secrets, weighted 17.85 %.

- Achieving strategic alignment, weighted 17.41 %.
- Quality improving across overall value chain weighted 16.83 %.
- Focusing on the main sources of value creation weighted 16.69 %.
- Increasing the rate of money generation across overall value chain weighted 16.54 %.
- Cost Reduction across overall value chain weighted 14.66 %.

The results of the scoring model demonstrate that outsourcing sources of dairy product packages has the greatest contribution to achieving sustainable competitive advantages. Thus, the decision of outsourcing sources of dairy product packages overcomes other decision alternatives, and should dominate to achieve sustainable competitive advantages.

5.2. Recommendations

The researcher recommends professionals to study the impact of each decision on the Total Value Chain. And recommends researchers to focus on real life through which problems are monitored and an appropriate methodology is determined to solve those problems.

5.3. Suggestions for Future Research

The researcher suggested studying the impact of any decision on the overall value chain.

Working on the integration of modern cost systems with the value chain, in order to take advantages of the organic interactive relationship that it reflects by cross model.

Trends in Cost Accounting across the Value Chain can lead to exciting times in cost accounting, as well as great future chances for researchers to make significant contributions to organizations and assist them provide value to their employees, customers, shareholders, and communities.

6. References

- Aktas, E., & Ulengin, F. (2005). Outsourcing logistics activities in Turkey. *Journal of Enterprise Information Management*, Vol. 18 No. 3, 2005. pp. 316-329.
- Banerjee, A., & Williams, S. A. (2009). International service outsourcing: Using offshore analytics to identify determinants of value-added outsourcing. *Strategic Outsourcing: An International Journal*, Vol. 2 No. 1, 2009. pp. 68-79.
- Bhagat, P., Byramjee, F., & Taiani, V. (2010). A framework of total value orientation for strategic outsourcing decisions. *Competitiveness Review: An International Business Journal*, Vol. 20 No. 4, 2010. pp. 305-321.
- Blocher, E. J., Stout, D. E., & Cokins, G. (2010). *Cost Management: A Strategic Emphasis*. 5e. McGraw-Hill Education.
- Davis, C. E., & Davis, E. (2014). *Managerial accounting*. John Wiley & Sons.
- Eggert, A., Böhm, E., & Cramer, C. (2017). Business service outsourcing in manufacturing firms: An event study. *Journal of Service Management*, Vol. 28 No. 3, 2017. pp. 476-498.
- El-Helbawy, S. (1994), Simultaneous treatment for multiple product make- or- buy decision: strategic cost analysis approach, Faculty of commerce, Tanta university. (In Arabic).
- Flanagan, D. J., Lepisto, D. A., & Ofstein, L. F. (2017). Coopetition among nascent craft breweries: a value chain analysis. *Journal of Small Business and Enterprise Development*, Vol. 25 No. 1, 2018. pp. 2-16.
- Gunasekaran, A., Irani, Z., Choy, K. L., Filippi, L., & Papadopoulos, T. (2015). Performance measures and metrics in outsourcing decisions: A review for research and applications. *International Journal of Production Economics*, 161, 153-166.

- Jirawala, S. (2015). Value Chain Analysis-Tool of Strategic Cost Management. *International Journal for Research in Management Pharmacy*, 4(2), 14-17.
- Johns, C. M., Kimber, N., Howieson, J., & Lawley, M. (2016). Evaluating the outcomes of VCA-led improvement projects: a case study of an Australian prawn fishery. *British Food Journal*, Vol. 118 No. 12, 2016. pp. 2997-3011.
- Lanen, W., Anderson, S., & Maher, M. (2013). *Fundamentals of cost accounting*. McGraw-Hill Education.
- McIvor, R. (2000). A practical framework for understanding the outsourcing process. *Supply Chain Management: an international journal*, Volume 5. Number 1. 2000. pp. 22-36.
- Mechtcheriakova, S., & Gurianova, E. (2015). Use of the chain of values for development outsourcing strategy. *Procedia Economics and Finance*, 24, 402-408.
- Mohammed, I. R., Shankar, R., & Banwet, D. K. (2008). Creating flex-lean-agile value chain by outsourcing: an ISM-based interventional roadmap. *Business Process Management Journal*, Vol. 14 No. 3, 2008. pp. 338-389.
- Msaddak, M., Ben-Nasr, J., & Zaibet, L. (2021). Dynamics of trust and cooperation in the dairy value chain: a game simulation approach. *Journal of International Food & Agribusiness Marketing*, 33(4), 353-373.
- Rieple, A., & Singh, R. (2010). A value chain analysis of the organic cotton industry: The case of UK retailers and Indian suppliers. *Ecological Economics*, 69(11), 2292-2302.
- Soosay, C., Fearn, A., & Dent, B. (2012). Sustainable value chain analysis—a case study of Oxford Landing from “vine to dine”.
-
- *Supply Chain Management: An International Journal*, 17/1 (2012) 68–77.

-
- Tjader, Y., May, J. H., Shang, J., Vargas, L. G., & Gao, N. (2014). Firm-level outsourcing decision making: A balanced scorecard-based analytic network process model. *International Journal of Production Economics*, 147, 614-623.
 - Yang, D. H., Kim, S., Nam, C., & Min, J. W. (2007). Developing a decision model for business process outsourcing. *Computers & Operations Research*, 34(12), 3769-3778.
 - Zhang, A., & Huang, G. Q. (2012). Impacts of business environment changes on global manufacturing outsourcing in China. *Supply Chain Management: An International Journal*, 17/2 (2012) 138–151.