Role of Resource Consumption Accounting in Supporting the Practices of Value-Maximizing and Cost-Reduction in Strategic Thought: A Theoretical Study

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Abstract

The study presents Resource Consumption Accounting (RCA) and its role as a contemporary cost approaches in support of the practices of value maximizing and cost reduction in strategic thinking. The study adopts a descriptive approach, based on content analysis, in an attempt to prove its prime goal. The study emphasizes the importance of the role played by RCA in support of the practices common in strategic thought, such as Lean Management, Six Sigma, Supply Chain Management and Target Costs.

Keywords: Resource Consumption Accounting, RCA, Lean Management, Six Sigma, Supply Chain Management, Target Cost.

Introduction

Many enterprises seek to embrace various administrative tools and strategic methods to help in creating value for their products and services at the lowest possible cost. Lean Management, just in time procurement and production, supply chain management, Six Sigma, and target costs are considered some of the most important tools and methods adopted by enterprises to achieve a competitive advantage from a value and cost perspective. However, the success of these tools and method in maximizing value provided to customer and reducing cost remains subject to the ability of information systems to provide cost-related data that are accurate, adequate and value-driven. These characteristics, in turn, require a cost approach that is able to provide a clear and comprehensive image of the cost in a timely manner.

Al-hebry & Al-matari (2017) classify cost approaches in two groups according to their timeline and ability to support the strategic direction of business organizations. The first group includes the traditional approaches that originated in the business environment where the market was dominated by the vendors and was interested only in providing information on the cost of production and inventory as an inherent goal of accounting for the costs under which these approaches originated. In addition to reflecting these concerns, contemporary approaches have aimed also to provide important information about value adding costs and efficient use of resources in service of the trends of the concept of cost management imposed by the administration needs for relevant and impactful information. With the concept of cost management oriented toward serving the enterprise’s strategy, the concept of strategic cost management emerged to aim mainly to achieve strategic cost reduction and support the strategic practices of enterprises. The success of strategic cost management in achieving its goal remains contingent upon the ability of the cost approach to provide detailed information.
beyond the scope of simply identifying the costs of value-adding and non-value-adding activities, but also to measure resource capacities and link them to value, and reflect ways to improve their efficiency. In order for such a cost approach to provide the above information, it must have a set of characteristics such as integrity, appropriateness, accuracy, reliability and – most importantly – the ability to provide quantitative information on resource capacities, because the fundamental goal of all practices presented by the strategic thought is to improve efficient utilization of available resources (European Foundation for Quality Management, 2016). These characteristics gives RCA precedence over other approaches (Al-hebry, 2017). This paper provides a theoretical foundation of the role of RCA in supporting the tools and methods of cost reduction and maximizing value in contemporary strategic thought. Thus, the rest of this paper has been divided into five sections. The first section presents the methodology of the study; the second section deals with RCA role in supporting Lean Management; the third displays the role played by RCA information in the application of Six Sigma; the fourth gives a picture of RCA impact on the success of the supply chain management philosophy; and the fifth explains RCA capabilities in supporting Target Cost.

**Methodology**

The study relies on a content analysis approach based on a review of the theoretical foundations of the topics under study in accounting and strategic thought in an attempt to reach an idea that serves the knowledge community. Content analysis studies are basically descriptive, but they are also characterized by depth and coherently logical analysis, leading to a specific outcome which the study seeks to prove.

**Lean Management**

Lean Management is considered one of the most widely used approaches to meet the challenges faced by business organizations to meet the desires of customers for innovative products, in short times and without high cost (Al-mouzani & Bouam, 2016). Lean Management is an administrative pattern designed to maintain the flow of customer demand at the highest value possible by eliminating all types of waste without compromising quality (Pryor, 2010; McCorick, 2010). The philosophy of this pattern is based on the principles of the Lean Production System evolved by Toyota in the 1950s and emerged as a cognitive concept in a book by Womack and Jones (The Machine that Changed the World (1991); cited in Hutchinson & Liao, 2009). Eliminating waste and maximizing customer value as a primary goal of Lean Management require directing management functions towards value streams, the definition of which requires the restructuring of the organization into a set of value streams classified into three groups: value streams required to fulfill orders of present products and customers, value streams of new products, and value streams of marketing and sales (Kennedy & Huntzinger, 2005). Value stream management expresses a different methodology for planning, directing and controlling activities and processes and measuring results to maximize the value that can be provided to the customer (Brosnahan, 2008).

According to Pickering and Byrnes (2016), the implementation of Lean Management projects requires a significantly change by all project personnel, including management accountants who must become members of a crucial teamwork to deliver value to the customer
instead of focusing on the tasks of supporting limited success. The role of management accounting in a lean enterprise boils down to directing all its practices and tools, particularly the cost approach, to focus on three important points that are considered as the heart and soul of Lean Management: These are customer value, waste reduction, and continuous improvements.

Lean Management requires cost information on value stream activities, processes and resources in a specific format and with certain characteristics that support maximizing value to the customer, reducing waste, and continuous improvements. The traditional cost approaches have been unable to provide these characteristics due to their failure to contain the principles of Lean nor did ABC (Activity-Based Costing) despite the intensive information it provides (Jonson, 2006; Grasso, 2006). Although Lean Accounting has gone towards reducing indirect costs by moving the purpose of cost from final product to value stream, but the cost data become meaningless when products in the value stream vary greatly, when the value stream does not include all product processes and activities, when the value stream involves many activities, processes and resources for which specific data are required, and when the decision maker needs detailed information on the value stream (Peckering & Pyrnes, 2016). This, in turn, requires a cost approach capable of solving the dilemma of providing accurate and detailed information on activities and processes in cases of multiple value stream products and services or when the decision-maker needs information that exceeds the cost of the total value stream while maintaining the simplicity of allocating the value stream. In this regard, RCA can be introduced as a cost approach able to provide detailed information and at the same time can be directed to measure the value stream as a final purpose of the cost. It, thus, yields two types of data: (a) general data concerned with measuring the cost of the value stream according to Lean Management, and (b) detailed data related to measuring the cost of activities and operations, tracking resources and analyzing activities from the perspective of value provided to the customer to achieve the goals of Lean Management in supporting the value provided to the customer, eliminating waste and maintaining continuous improvement. Therefore, RCA can play a prominent role in supporting Lean Management through:

1) Support value provided to customer:

Hussain & Malik (2016) see that is the focus of attention of Lean Management (when it comes to quality and efficiency of operations) is placed on the systematic disposal of waste as well as non-value-added activities. When it comes to value-added and non-value-added activities, the value chain cannot be ignored, being one of the most important analyses that give a definition of activities from the perspective of value provided to the customer. As long as the value chain analysis is applied, it is necessary to have a cost approach capable of meeting these requirements. In this regard, Alhebry (2017) argues that RCA is one of the most compatible approaches with the value chain concept, as RCA measures all capacities consumed on these non-value-added activities and also expresses them in the form of a capacity determined by the quantity of inputs and the cost expressed in monetary units. Besides, RCA determines the amount of resources consumed on value-added and value-supporting activities and provides multiple drives that show how resources are consumed by these activities. Thus, management can get many suggestions on how to reduce the amount of capacity consumed on these activities and ultimately maximize the value to the customer at the lowest possible cost.
2) Accuracy, Reliability and Diversity of Cost Information:

Intense competition in the modern business environment has driven organizations to offer a wide range of products and services, so the level of detail of cost information should be tantamount to the level of diversity of such products and services (Pickering & Byrnes, 2016). For its part, Lean Accounting considers cost measurement to be simple and can be done by dividing the cost of the value stream by the total stream outputs. This method looks at measurement from the surface level and produces misleading information if the products vary within the value stream. It may also lead to the identification of waste removal initiatives and improvements that may be detrimental to the least costly or more profitable product. RCA can support the value stream approach with regard to the measurement of the cost of stream products and services from the perspective of consumed resources, while at the same time providing more accurate and reliable information for these products and services for profitability analysis and decision-making. Thus, two levels of information can be obtained on the cost of each product or service within the value stream: the first level is aggregate at the overall value stream level and is used for the purpose of preparing the value stream income statement; and the second is detailed at the product or service level and is used to make operational decisions associated with waste removal and continuous improvements as well as to make strategic decisions related to the product or service.

3) Support of Long-Term Decisions:

Cunningham (2018) believes that the preparation of the income statement according to the value stream approach that treats all costs as a variable within the stream is the most important task of the cost accountant in a Lean Management environment. Contribution margin analyses at the value stream level are indeed very useful in the short term. However, long-term decisions require comprehensive, detailed and accurate information. Such information is provided by RCA as an add-on when it is necessary to take into account the long-term effects of decisions associated with the value stream.

4) Routing resources within a value stream:

Value streams are based on the idea of pooling all resources for producing a homogeneous product or family of products into a path consisting of a set of productive cells. RCA, in turn, aggregates the value stream resources into homogeneous aggregates based on the outputs of that aggregator and mediates activities in the absence of this relationship. Thus, additional information is provided on the causes of resource consumption, where it is and what are the most resource-consuming activities within the value stream. This information rationalizes resource consumption, reduces waste, and supports continuous improvement initiatives.

5) Throughput Costing and Production Mix Decisions:

When resources are constrained within the value stream, it is necessary to take into account the throughput and the contribution of each product in the achievement of this throughput (Pickering & Byrnes, 2016). This requires an analysis of the cost per unit of constrained resources that cannot be calculated using the simple way of unit cost of value stream because this way measures at the macro level. RCA provides this information and supports maximization of the productivity of constrained resources through a simple and accurate measurement of the costs of constrained resources throughout the entire value stream. Cost will be expressed as resources measured in a predetermined capacity unit, and the
consumption of products for each resource’s capacity is also limited to a certain number of resource capacity units. By comparing the amount of capacity consumed by the resource, we can weigh one product over another depending on units it consumes compared to the value it adds. Throughput measures will be at detailed levels of resources where RCA can provide at the level of each resource within the value stream.

6) Detection of Constrained Resources:

It also helps in the detection of constrained resources that hinder the flow process, disrupt the resources, and bring about odds of accumulating inventory within the production lines, and provides some solutions to overcome restrictions. RCA has the ability to illustrate the physical use of resources through production activities and the capacities available for these activities, and thus the ability to mix resource use metrics with the productive capacities of the activities, identify constraints and predict their impacts on production flows and inventory building.

7) Employee Empowerment Support:

Employee empowerment is one of the principles of Lean Management. It requires quick and understandable information for the employee about cost and throughput, as well as performance monitoring and evaluation systems that support motivation. Through technological integration, RCA allows for speed of information. Besides, the expression of cost in the form of consumed capacities enables RCA to generate appropriate reports for the various administrative levels, including detailed information for operational levels in a simple and useful framework that encourages a culture of cost perception and makes discussion and decision-making a daily, frequent and certified event based on real numbers. Therefore, the employee will be able to estimate the results of any initiatives in advance simply and quickly. Regarding performance monitoring and evaluation, RCA supports what is known for the interactive use of control systems, which is reflected positively in the development and dissemination of organizational capacities, which are considered by Henri (2006) as event-stemmed resources that arise when the skills of individuals are coordinated in repeatable work patterns. This interactive use of control systems is carried out by identifying a team responsible for a resource pool with all its outputs and activities, or even for the entire value stream on the one hand, and creating a type of self-monitoring resulting from the involvement of individuals in the development and continuous adjustment of evaluation criteria on the other. Therefore, RCA shifts accountability from a system of monitoring and evaluation to a system of motivation and creativity that supports the achievement of competitive advantages that contribute to creating value for the organization.

8) Support Waste Elimination and Continuous Improvement Initiatives:

To support waste elimination and continuous improvement initiatives, there is a need for a cost approach with three essential characteristics:

- Appropriate performance metrics:

McVay et al. (2013) identify three types of metrics needed to support the success of waste disposal and continuous improvement initiatives, i.e. in what is known as Box Score. These are operational metrics, capacity metrics, and financial metrics. These three types of metrics are utilized by RCA at the required levels of measurement. With regard to the operational metrics, for example, RCA includes activity drivers that can
provide a huge amount of operational standards. RCA offers three capacity measurements at the level of each resource pool within the value stream: available practical capacities, produced (used) capacities, and idle capacities. In addition, the financial metrics for resource and conversion costs are also available for each value stream and are directly linked to a specific product in a simple and understandable way.

- Technological Integration and Predictive capability:
  Technological integration means the ability of the approach to collect diverse data with different characteristics and generate information for a variety of purposes easily and quickly. Predictive capability means that the predictions projected by the approach under certain circumstances should reflect what would happen precisely and accurately. With regard to technological integration, RCA has a high level of IT integration, particularly with ERP system (Alhebry, 2017). This integration enables RCA to collect data on all resources easily and quickly. It, thus, provide timely and appropriate information on the volume of consumed resources, the idle capacities, and the causes of the consumption of these capacities. Regarding the predictive capability, RCA provides causal relationships between the amounts of resources and the output volume, as well as the additional causal relationships of activities to improve the accuracy of estimates of activity-based budget, which eventually offers a full view of the reduction in resources that the proposed initiatives could accomplish before implementation. Weirich (2010) sees that a deep understanding of costs as resource flows creates an ability to predict the results of Lean Management initiatives without having to wait for them to appear in a way that makes it difficult to correct them. The causal and obvious capacity consumption relationships of RCA present a new picture of continuous improvement from the perspective of consumed capacities. These relationships direct efforts within each resource pool to generate the same amount of outputs using less resource capacities on the one hand, and less amount of activity drivers or capacities consumed by these drivers – in the absence of direct causal relationships between the inputs and outputs – on the other hand. Technological integration and predictive capacity provide accurate, reliable and relevant information not only on the true causes of waste and prospects of improvement but also on the results of all initiatives to eliminate waste and induce continuous improvement.

- Availability of Quantitative and Financial Information:
  Lack of quantitative and financial information on waste as well as waste reduction initiatives remains one of the most important gaps in Lean Management. However, RCA can address these gaps, firstly by identifying all the factors influencing the quantities of capacities used, secondly by linking the financial results to the behavior of these factors in a simple and concise manner, and thirdly by providing a clear causal quantitative relationship between inputs and outputs.

9) Maximizing Net Cash Flow:
  The primary goal of Lean Management initiatives is to reduce as much of the costs as possible while maximizing the cash flow from these costs (Shing & Dillon, 1989). All
traditional cost approaches cannot maximize the cash flow generated by cost. The reason behind that, according to Lee (2016), is that these approaches are a poor proxy of cash flow. Achieving the above goal requires an improvement in output capacity, which cannot be established without determining a causal relationship between input capacity and output demand (Lee, 2017). This, in turn, cannot be realized at the value stream level because there are multiple causes of resource consumption that surface value stream analysis cannot detect. RCA provides a clear picture of how resource capacity affects cash flows through a model of input-output relationships defined by quantity produced. Therefore, we can estimate in advance the amount of resources needed to generate the cash flow that can be realized. Thus, any excess resources can be eliminated of and the cash flow maximized or probably invested in generating additional cash flows whenever possible.

It can generally be said that RCA capabilities in supporting Lean Management is the result of agreement on the foundations which serve as the basis on which both define cost. Whereas Lean Management assumes that waste is the cause of cost and identifies it in seven forms\(^1\) closely related to efficiency of resource utilization. RCA defines cost as consumed resources. Cost reduction will therefore be achieved by reducing the amount of resources utilized through Lean identification of waste, waste reduction initiatives, and mechanisms for continuous improvement, in addition to RCA clarification of waste locations, improvement opportunities, and the results of Lean Management initiatives.

**Six Sigma:**

Six Sigma represents a disciplined, structured and data-driven methodology which focuses on the reduction and statistical measurement of operation variability so that the process output defects do not exceed 3.4/1,000,000 (Erdil, Aktas and Arani, 2018). To achieve this, the causes of errors and defects in processes and activities must be reduced by focusing on outputs that are of high importance to the client (Costa, Filho, Fredendall and Paredes, 2018). Six Sigma depends on a step-by-step approach or a roadmap for improvement known as DMAIC approach (Define, Measure, Analyze, Improve and Control) (Arumugan, Antony and Linderman, 2014). While Marzagao & Carvalho (2016) see that the objectives of all Six Sigma projects do not go beyond the framework of quality improvement, cost reductions and customer satisfaction – which are the main dimensions of the success of any project – Hornstein (2015) confirms that the success of Six Sigma in achieving those objectives depends significantly on the availability of three key elements: administrative changes, management of project optimization, and supporting information systems. Based on the aforementioned objectives of Six Sigma project and the key elements to achieve these objectives, RCA role becomes more prominent as RCA represents one of the most accurate cost approaches in the measurement and support of all reduction initiatives, and is easily integrated with value maximization initiatives in management thought (Alhebri, 2017). Besides, RCA characteristics will be reflected in terms of enhancing the effectiveness of the costing information system (being one of the most prominent components of a comprehensive information system in the organization), and will therefore be reflected further in the form of

\[^1\] These are overproduction, inventory, movement, recall, waiting, defects, and over-operation. In the Japanese context, these are known collectively as ‘Muda’.

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enhancing the effectiveness of the comprehensive information system of the organization in general, which in turn represents one of the elements of the application of Six Sigma. RCA can support the implementation of Six Sigma programs through its capacities in the definition of activities at detailed levels and identification of performance constraints, control and optimization and design processes as well as evaluation of their effectiveness in reducing deviations and inducing additional improvements. RCA contributions in support of Six Sigma’s operational methodology can be clarified with reference to DMAIC as follows:

**Definition:** Causal relationships defined between the quantities of resources and outputs within each resource pool as well as maps of activities and processes for building RCA are essential to determine all the capacities, processes and activities needed to fulfill the client’s order.

**Measurement:** The capacity required for the final outputs of each resource pool on the one hand, and the capacity consumption drivers of each activity on the other hand are used to determine the actual contribution of each activity or process to the final product and provide process metrics that can be translated into a capacity that makes it easier for employees to understand. Another point that shows RCA supremacy in terms of measurement is RCA ability to provide performance measures at three levels – i.e. output level, activity level, and operation level. The quantitative cost drives on which RCA relies at the three levels can be framed in a Six Sigma roadmap so that they can serve as pre-defined target performance indicators.

**Analysis:** In this step, the sources of waste and variance are analyzed and the process examined to determine the main causes. RCA metrics along with cost drivers integrated into a Six Sigma roadmap can contribute to the conceptualization of where errors and defects are and why they occur.

**Improvement:** In this step, a cost-benefit analysis is done for all improvement initiatives. Here, RCA will not only provide cost information for all initiatives but also offer improvement initiatives. It provides precise indications of where development can take place and how this development can be achieved without compromising the value to the customer through a wide range of cost drivers, activity analysis, precise activities and operations and direct and indirect causal relationships.

**Control:** Control focuses on maintaining the gains of improvements through the development and implementation of control plans. RCA can establish standard cost control procedures at the detailed levels at which improvement initiatives are developed as well as support the vital process control tools that confirm the achievement of Six Sigma project objectives.

Supply Chain Management:

James (2012) classified the multiple concepts of the supply chain according to their depth in two groups. The first is a supply chain viewed traditionally through its components as all units for the production and delivery of a particular commodity. The second vision of the supply chain is deeper and deals with it strategically as a set of interrelated activities aimed at creating value for the customer. The latter is the vision which Supply Chain Forum has adopted in its definition of supply chain management, as an administrative approach to coordinate the operations and activities of supply chain units with the aim of achieving maximum customer value at the lowest possible cost levels by creating a clear picture of the material, cash and information flows that support decision-making related to the production and delivery of goods.
and services (ibid.). According to the objective and strategic concept of the supply chain, Wang et al. (2018) believe that information is the property with most influence on chain management and therefore any cost information asymmetry among the chain parties may adversely affect decisions taken and the final outcome of the performance of the entire chain.

To achieve the objectives of the supply chain (about which information systems must provide data), one of the main and important tasks is to determine the location and real causes of cost and its impact on the whole chain, taking into account the determination of the contribution of each activity to achieve the final product (Kim et al., 2016). The determination of this point can be very difficult given the multiplicity of chain units and their activities variance, particularly as the cost structure changes in favor of indirect costs. This, in turn, requires a cost approach that is able to create a clear picture of the cost and its causes, while providing advance information on alternatives to production and delivery of the product and service. With its capabilities to analyze resources and activities, RCA can give this picture and information that supports the supply chain management, through:

- Linking outputs within resource pools to the amount and cost of resources consumed so it can be determined whether these outputs can be generated in another part of the chain with lower resources and cost.
- Estimation and disposal/exploitation of the idle capacities in the entire chain. In this regard, Kim et al. (2016) confirm that the use of a resource-driven model is more useful than other cost approaches that leave idle capacity costs within the chain or reclassify them as period costs.
- From the activity point of view, RCA will measure the cost of the activity with a dual view. In addition to providing information on the cost of the activity, it will provide information on the amount of resources consumed by the activity, and thus it will be easier to determine the possibility of saving resources and exploiting other less expensive resources for these activities. Besides the cost perspective, the activity approach will support activity analyzes from a customer value perspective.
- Accurate measurement of the cost within the entire chain. Alhebry (2017) stresses that RCA is considered to be the most accurate and cost-effective approach to value chain analysis. It provides accurate and value-driven information and thus supports strategic cost reduction on the one hand and provides accurate information to decision makers within the chain on the other hand, particularly those associated with the production mix.
- Supporting performance measurement systems within the chain through the cost drivers provided by RCA, which can be used as measures of performance in addition to the integrated capabilities of this approach with various performance measurement models (Alhebry & Almatari, 2017).
- Providing chain units with an effective planning method that provides an analysis of less expensive value generation alternatives prior to implementation.
Target Cost:

Unlike the traditional concept of target costs, which is seen as a market-oriented price-setting tool, the contemporary concept treats target cost as an integrated approach to strategic cost management that converts diverse product, market, and resource information into quantitative measures based on strategic functions (Pazarviren & Celayir, 2013). Target costs are primarily aimed at achieving a strategic cost reduction directed at a value desired by the customer. It is not easy to achieve this goal due to shortened product lifecycle resulting from the extreme diversity of customer values on the one hand, the need for real-time information to control the changing constraint conditions in a manner different from the traditional way of controlling costs under certain constraint condition on the other hand (Park et al., 2016). In addition, the nature of the target costs has focused on the activity engineering rather than the costs per unit. Finally, the close relationship between both cost components and product value coupled with the difficulty of determining specific cost components has contributed significantly to the realization of product value (Patrau & Coca, 2017). Therefore, the achievement of the target cost goal requires tools capable of designing and analyzing value, as well as an information system that has the ability to (a) provide fast and accurate information on the impact of change in functions, processes and activities on customer value, while also providing a clear picture of the costs of each job and activity, and (b) integrate with management tools to realize the target cost. These requirements for information systems make RCA one of the most adequate cost approaches to design, implement, and improve target cost (Alqady & Elhelbawy, 2016) as it is able to provide accurate estimates of the cost of the product, the cost of various implementation alternatives, and the cost improvement prospects after implementation.

The role RCA can play in support of target cost is as follows:

- Accurate estimation of the cost of new or upgraded products.
- Identification of all the resources needed to implement the product as well as all the cost drivers that will cause resource consumption, and this in turn will contribute to providing an accurate description of the cost structure of all alternatives to production and delivery of the product.
- Integration with different target cost realization tools, and providing the information they need through RCA integration feature. According to Alhebry (2017), RCA has an ability to support and integrate with modern cost management tools in general, and with value chain analysis in particular, and this plays an important role in the target cost implementation phase. RCA provides a clear picture of the cost of each value chain activity along with appropriate solutions to improve this cost without affecting the value provided to the customer.
- Continuous improvement, which is one of the steps to realize the target value in the implementation phase. Here, RCA seeks to identify the quantities of resources that must be reduced to achieve continuous improvement.

Conclusions:

RCA attempts to translate the cost into consumed resources, providing a set of consumption relationships that can be framed in two groups. The first is direct and is defined as the volume of outputs produced for each resource pool; and the second is indirect and is...
defined by centering activities – when necessary and if the first is insufficient – in determining the amount of resources consumed. Besides, its ability to integrate with value chain analysis and technological systems (i.e. ERP system) has made it a value-driven approach on the one hand and able to provide timely information on the other. Given the aforementioned characteristics and compared to Lean Management principles, it is found that RCA provides information at the value stream level that can be used for direct measurement of the value stream batch cost, as well as providing more in-depth information related to products, activities, resource consumption, and value realized by each activity within the stream. Such information maximizes value and supports waste elimination and continuous improvement, particularly in case of variations of multiple products and consumption of value stream resources. With regard to just in time purchasing and production, RCA plays an important role in controlling the flow within productive cells by translating cost drivers into time-consuming resources. The feature of cost translation into consumed resources has a benefit that goes beyond the boundaries of the organization borders to the entire supply chain by providing information on resource consumption alternatives throughout the chain. This aspect supports the reduction of activities, provision of capacities, and possible opportunities to carry out some activities in units with idle resources or where activity performance consumes fewer resources. Six Sigma also benefits from such simple and clear information in the implementation of its methodology of statistical error reduction through definition, measurement, analysis and control. Target cost needs an activity-based cost approach, a methodology that RCA provides, even in a deeper and clearer way. Therefore, the expected cost of products will be more accurately measured, and all targeted cost realization initiatives will be accurately calculated and production alternatives evaluated from the perspective of value provided to the customer.

**Limits and Future Research:**

The inability to obtain data from business organizations in developing countries is one of the most important constraints to converting ideas and theoretical analysis studies into practical studies that benefit business organizations and researchers and reveal the validity of theoretical analyses. In this sense, this study may open up horizons for theoretical studies aimed to illustrate the validity of the ideas proposed in this study, develop and elaborate them, and seek to apply these ideas in business organizations or surveys to reveal the attitudes of cost and management accountants toward these ideas.

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