Integrating the value chain and balanced scorecard to evaluate the overall performance of a tourism organization

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Abstract

This study presented an endeavour to integrate the value chain activities with the Balanced Scorecard for a comprehensive evaluation of an organization’s strategic performance. It also demonstrated the connection and the integration of the activities of the value chain with the Balanced Scorecard. The financial measurement was linked with non-financial measurement by integrating these techniques to achieve an appropriate performance that supports all aspects of the organizational performance. Consequently, the research problem in this study emerged, which is due to the concentration of many organizations on the measurement of financial performance. Notably, the latter caused the decline of some organizations from the competitive market. Thus, organizations must evaluate the financial and non-financial performance, as this assessment has helped organizations rise and keep abreast with developments and enter the global competitive market. The level of organizational performance was raised by integrating financial and non-financial measures. The study found that value chain and balance scorecard work together to perform operations of the organization appropriately and facilitate the measurement and evaluation of performance. Moreover, the Balanced Scorecard has a significant impact on the planning and control of organizational performance, and the value chain and the balanced label card have added value to the organization and customer needs.

Keywords: Value chain, Balanced Scorecard, Planning organizational performance, evaluation.

Introduction

With the major developments in technology, industrialization and production, a rapidly changing rate in the economic performance have been witnessed. However, overlooking non-financial aspects of research has led new organizations to enter the competitive market, consequently causing the decline of other organizations. Many leading companies unquestionably initiated their actions to take over strategic evaluation tools, such as the balanced scorecard, when they believed that it authorized them to enhance their performance thus supporting the aim to raise the organization’s goals and global objectives (Quesado, Aibar Guzmán & Lima, 2018). The proper performance of the organization, including financial and non-financial performances, and its evaluation are measured by linking the basic and support activities to the value chain with the four perspectives of the Balanced Scorecard. Resources are allocated efficiently by working and guiding value chain activities. The direction of these activities, as required by the needs of the market and the customers, assists inter alia tourism organizations in keeping abreast with the major developments and competitions through which the market operates. The extant literature suggests that when organizations employ a Balanced Scorecard approach they tend to outperform those without a formal approach to strategic performance management.
This research paper intended to present a contribution to the current state of knowledge through facilitating organizational development. An effort was devoted to shed light on how the integration of value chain activities through the Balanced Scorecard binoculars can access the overall function and complete performance of an organization.

**Literature review**

**Value chain**

The value chain analyzes the relationship between the existing productive activities. Value is defined as the characteristics of the performance and the character of all aspects of the goods and services that customers wish to obtain. Moreover, it represents a range of activities in which the economic unit works to provide a valuable product or service to the market. Subsequently, the value chain concept was expanded to describe a series of organizational activities that add value to each step, from processing raw materials to the final product and delivering them to customers. Simatupang, Piboonrungroj and Williams (2017) reported that all integrated activities and the value chain are managed by the value chain in-production units for service or non-profit units. Furthermore, Rich et al. (2009) added that the full range of activities required in producing a product or service, is determined by the value chain through the production stages, where the product passes through to become a final product, get delivered to customers, and receive feedback about the product, as sis the case in restaurants for example. These activities and the interrelationships between them reduce the activities without any value. Through continuous improvement and coordination of organizational processes, these linkages may indeed lead to a competitive advantage (Sultan, 2013).

All the activities, functions, roles, and units involved in the production, as well as the delivery and consumption of products, are described within the value chain—from raw materials to the end consumer and re-feedback through feedback. Improving the performance of the entire chain is possible by understanding the factors related to quality that leads to consumer satisfaction. The market is conscious of the satisfaction of consumers as the former aims to understand the needs of the latter. The needs of the consumers move across the value chain to production, decision support, and value adding. Adopting a series of consumer views as feedback aids in providing a competitive advantage and superior performance in the long term. The values added to the consumer are distinctive and difficult to imitate, which lead to progress in the performance of value chains and market orientation. Saunders, Dalziel, Wilson, McIntyre, Collier, Kaye-Blake and Reid (2016) have reported that the value chain is a combination of nine value-adding activities that work together in a relationship to benefit customers.

Integrating these activities leads to a competitive strategy in achieving superior performance. Competitive advantage is achieved in line with management performance trends through innovation in product development and marketing and steering of the value chain. The first step in the implementation of the strategy is developing a strategic concept through the theory of strong competition strategy (Feller, Shunk, & Callarman, 2006). In other words, a value chain is a set of main supporting activities aimed at creating value in a chain. In leading cost and differentiation, Porter (2011) devised the general strategies of the value chain to achieve competitive advantage. Kannegiesser (2008) stated that these strategies set the value chain through the principle, which provides access to competitive advantage.

Furthermore Wahito (2011), defined value chain as a system of interrelated activities linking and supporting the core activities, where the activity is carried out, with the cost of performing other activities rather than a set of independent activities. The organization provides value to its customers and hopes to win the customer’s loyalty and obtain the proper design of the value chain, thereby identifying its weaknesses in the procedures. The value chain analysis emphasizes the importance of quality to the processes implemented and thus adds further
value to these activities (Simatupang, Piboonrungroj & Williams, 2017). Value chain activities are divided into two types, which are presented below (Porter & Millar, 1985; Kannegiesser, 2008; Wahito, 2011; Porter, 2011):

(i) Basic activities: These activities are involved in the physical construction of the product, its sale and transfer to the buyer. They have a significant impact on the production, maintenance, sale, and support of the products or services to be supplied. These activities include five general categories, namely, Production (operations), Outbound Logistics, Sales and Marketing, and Services.

(ii) Support activities: These activities support basic activities through human resources, inputs, technology, and various functions at different organizational levels. To improve the efficiency and effectiveness of the processes, support activities are linked to basic activities (Wahito, 2011). One example of support activities is infrastructure.

Value chain is a general framework that allows an analysis of the set of applications.

This analysis allocates division of an organization’s activities to be broadly categorized. Three sub-activities exist in the series Value, which are as follows (McGee, Wilson & Thomas, 2010; McKay & Subramoney, 2017):

a. Direct activities: These activities are directly involved in creating value for customers, such as assembly, sales, advertising, and marketing.

b. Indirect activities: These activities facilitate the performance of direct activities on a continuous basis, such as maintenance, scheduling, and management.

c. Quality Assurance: These activities guarantee the quality of other activities, such as control, testing, and auditing (Yilmaz & Bititci, 2006).

The specific objective of each organization’s strategies determines the performance measurement criteria for each value chain. Thus, suitably directing the activities of the value chain is compatible with the performance of the organization. Moreover, integrating it with the Balanced Scorecard can evaluate and manage the organizational performance.

**Balanced Scorecard**

In 1992, Kaplan and Norton (2001) introduced the Balanced Scorecard and defined it as a method of transforming an organizational strategy into actions to measure and evaluate organizational performance. The Balanced Scorecard functions by measuring the financial and non-financial performance of an organization and serves as an important tool to develop and perform organizational strategies. It is also known as a concept of organizational strategies in development management, which is concerned with unit operations and management. Arzamastseva and Khayrullina (2017) added that Balanced Scorecard is a concept of managing the strategic development of an organization in relation to its operations and performance. Nicolaides (2006) emphasized that in the tourism and hospitality industry, there are overarching management and leadership responsibilities and duties for the day-to-day running of the average hotel, using a Balanced Scorecard. He also states there is no dichotomy between leadership and management - the two go hand-in-hand. Such an analysis is considered constructive and important for the ongoing development of management in the hospitality industry because there have been numerous questions leveled by managers of hotels who feel that their jobs do not allow them to lead as they see fit and the Balanced Scorecard is a useful tool. They also need a positive relationships with their employees to grow in the workplace as this does not happen in isolation. Connected to modern-day approaches to refining business performance in the management literature, performance measurement approaches must analyzed using a Balanced Scorecard context (Nicolaides, 2006).
Alternately, Iranzadeh, Nojehdeh and Emami (2017) defined Balanced Scorecard as a system of performance evaluation, which consists of the main part of the strategies employed by several organizations operating through four perspectives, namely, finance, customers, operations, growth, and learning. The scorecard also supports the organization in transferring their strategies to other organizations via a set of operational objectives. The financial aspects of the work should be the sole focus of the administration by concentrating on customers, internal processes, innovation, and educational aspects. Managers are provided with an overview of work by the concept of Chimbengo, Mkandawire and Hanif (2017). Four categories of balanced scorecard exist (Kaplan & Norton, 2001), as follows:

(i) Financial Perspective: This category is the outcome for every profit-seeking organization, which adds value to the shareholders. Based on customer demand and a good market, an organization increases its economic value through revenue growth and productivity growth. From the perspective of shareholders, this value represents the growth, profitability, and risk strategy of an organization.

(ii) Customer Perspective: Any strategy aims to maximize and deliver value to customers by satisfying their needs through distinctive products, prices, and services. Customer strategy involves customer satisfaction and acknowledgement of new customers’ share in the market. In other words, creating a relationship with target customers is vital.

(iii) Internal Processes: This category comprises new products and customer-response time. Managers must focus on the key internal processes that enable them to meet customers’ needs. Internal business metrics should be selected on the basis of business processes that have a strong impact on customer and shareholders’ satisfaction.

(iv) Growth and Learning: This perspective consists of information systems, employee motivation, management efficiency, training, customer satisfaction and risk management, and technological development (Cunha Callado & Jack, 2015). This vision ensures that the organization focuses on the infrastructure needed for long-term development, growth, and continuous improvement by enhancing its organizational work to meet the demands of competition and challenges while providing values to the customers (Sahiti, Ahmeti, Sahit & Aliu, 2016).

As the Balanced Scorecard is considered a useful strategic model to apply in business processes, the measurement of performance and strategic management in the organization should focus on adding value and the effectiveness of activities (Balfaqih, Nopiah, Saibani & Al-Nory, 2016). The Balanced Scorecard should be well-designed to describe the strategies, objectives, and benchmarks being followed. Kaplan and Norton (2001) emphasized that a successful organization that evaluates its performance does not only utilize financial procedures but also regulates them with the other three perspectives (Poureisa, Ahmadgourabi & Efteghar, 2013). Wang and Chang (2013) concluded that a Balanced Scorecard functions to scale performance widely and focuses on endoscopy results in terms of comprehensiveness and safety assessment.

Integration of the Value Chain and the Balanced Scorecard to assess the Overall Performance of an Organization

Lawson, Blocher, Brewer, Morris, Stocks, Sorensen and Wouters (2015) defined strategic performance assessment as a structural process that focuses on the information used in determining the level at which objectives are achieved and the making of necessary decisions and solutions to weaknesses for sound growth and increased strength. In other words, performance is defined as a multi-dimensional construction. Time, quality, flexibility, financial efficiency, customer satisfaction, and human resources are considered by Kaplan and Norton as the key performance dimensions in 1996 (Chimbengo, Mkandawire & Hanif, 2017). The following steps are crucial for the success of any organization: identifying, tracking, and evaluating performance across multiple financial and non-financial perspectives by using a
balanced scorecard in managing reports and monitoring performance and orders (Kaplan, 2010).

Value chain is analyzed to determine the performance of the appropriate methods undertaken by an organization in providing products and services of value to its customers. Moreover, it is used to determine and ensure that the resources of each department are handled consistently with the processes to improve the utilization of resources (Martin, 2005). A set of activities in each organization are carried out for the design, production, marketing, and support of its products. All these activities can be presented using value chain. The value chain of an organization reflects the performance of individual activities, which likewise reflects the performance of these organizations. An approach to the implementation of its strategy is represented by the value chain of each unit. Porter (2011) has mentioned that the value chain of an organization differs to a certain extent with the different elements of the production lines or difference in customers, geographical regions, or channels. Performance measurement is considered a critical tool for managing an organization by directing value chain activities with a balanced scorecard (Martin, 2005). The financial and non-financial performances of the organization are assessed by integrating these two techniques, which also helps in assessing appropriate measurement and sequentially raising the level of organizational performance (Mjongwana & Kamala, 2018).

Methodology

Tests of Content Validity

A number of competent specialists, who served as arbitrators of the paragraphs of the questionnaires, were provided with measures of the steps of the tests to be used. Focusing on the degree of relevance of the items to the dimensions expressed and the level of validity in measuring the design measure options have become the main tools for data collection (Flayyih, Mohammed & Talab, 2019). The validity of the content was tested through the so-called exploratory and authoritative truths using the two available statistical programs, namely, SPSS 23 and AMOS 23. The Cronbach’s Alpha coefficient was ascertained by testing the internal consistency between the items and the dimensions of the questionnaire.

Validity of the Exploratory Construction

Exploratory Factor Analysis was used to reduce some of the items in the questionnaire or the standards at certain times, especially after amending some of these items through the basic components (Principal Components) using SPSSv23. Thus, the non-associated sections of the scale structure were investigated. The adequacy of the sample was determined using the criterion of credibility associated with the analysis technique known as Kaiser-Meyer-Olkin (KMO). The value realized can be used to ensure that no null-value correlation coefficients exist between the items of the questionnaire, where acceptable correlations were blocked according to the significance of the Chi-Square as shown in Table 1.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>KMO</th>
<th>Bartlett Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Chain</td>
<td>0.650</td>
<td>( x^2 = 352.569, \text{df} = 66, \text{P} = 0.000 )</td>
</tr>
<tr>
<td>Balanced Scorecard</td>
<td>0.791</td>
<td>( x^2 = 126.893, \text{df} = 10, \text{P} = 0.000 )</td>
</tr>
<tr>
<td>Financial Perspective</td>
<td>0.754</td>
<td>( x^2 = 83.446, \text{df} = 3, \text{P} = 0.000 )</td>
</tr>
<tr>
<td>Customer Perspective</td>
<td>0.737</td>
<td>( x^2 = 70.5, \text{df} = 3, \text{P} = 0.000 )</td>
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<tr>
<td>Internal Business Process Perspective</td>
<td>0.625</td>
<td>( x^2 = 42.584, \text{df} = 3, \text{P} = 0.000 )</td>
</tr>
<tr>
<td>Learning and Growth Perspective</td>
<td>0.770</td>
<td>( x^2 = 153.370, \text{df} = 10, \text{P} = 0.000 )</td>
</tr>
<tr>
<td>Performance Evaluation</td>
<td>0.853</td>
<td>( x^2 = 162.13, \text{df} = 28, \text{P} = 0.000 )</td>
</tr>
</tbody>
</table>
Validation of Concrete Construction

After testing the global exploratory analysis via the Confirmatory Factor Analysis, matching the dimensions of the variables and the questions expressed in the questionnaires was necessary as a measure of research to state their theoretical basis in the literature. AMOS 23 was used for this purpose (Alkhafaji, Talab, Flayyih & Hussein, 2017). Based on some of the known quality indicators of conformity identified in this research, ascertaining the existence of the reliability of construction was possible. The Chi-Square was used to test the degree of freedom (Df) to avoid surpassing the latter (5). To verify the constructional reliability, results were confirmed by each of the seven dimensions, which represent the measures of the three variables built on the basis of the proposed relationships. The values exceeded 40%, which indicate the quality of conformity used in the current research as depicted in Figs 1, 2 and 3.

Figure 1. Reliability of the value chain construction

Figure 2. Reliability of the Balanced Scorecard construction
Internal Consistency Test

The stability of the scale that led to similar results after repeated testing was an internal consistency measured in accordance with Cronbach’s Alpha correlation coefficient. Table 2 presented the results of the internal consistency test. The latter was conducted using the statistical program SPSS23. The value demonstrated the internal consistency of the scales at the level of its variables by its dimensions and at the macro level of the scale as the correlation coefficients, which exceeded the accepted standard value of 0.70.

Table 2: Results of the internal consistency test of the research scale

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha Variables</th>
<th>Cronbach’s Alpha Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Chain</td>
<td>0.813</td>
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</tr>
<tr>
<td>Balanced Scorecard</td>
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<td></td>
</tr>
<tr>
<td>Performance Evaluation</td>
<td>0.77</td>
<td>0.89</td>
</tr>
</tbody>
</table>

Results and analysis

Testing the research hypotheses

The main hypothesis of this study is that “the value chain and the balanced scorecard have a significant effect on the following dimensions: general equilibrium scorecard, financial perspective, customer perspective, internal operations perspective, and growth and learning perspective.” Results presented in Table 3 on the test of the relationship, as provided in the main hypothesis of this study, were attributable to the effects of the dimensions of the value series (0.183, P = 0.007 = β), the balanced scorecard of value (P = 0.000, the customer perspective: β = 0.174, P = 0.007), the operations (P = 0.000, β = 0.348), and finally, after the growth and learning perspective (P = 0.17, β = 0.008) with a variable of performance evaluation. The financial perspective had no significant effect on this predicted relationship (P = 0.071, β = 0.05). The explanatory power of the model expressed by the limiting factor (R² = 0.81) is with a complete statistical significance (P = 0.000). In other words, the values are significant at 81%, except in the case of the financial perspective.
The remainder of the limiting factor’s unexplained variance is related to other factors or variables beyond the limits of the present study; thus, the test model of this hypothesis or the testable relationship is excluded.

Table 3. Results of the main hypothesis test

<table>
<thead>
<tr>
<th>Paths of regression</th>
<th>Statistical indicators</th>
<th>B</th>
<th>t</th>
<th>SE</th>
<th>CR</th>
<th>Sig.</th>
<th>R²</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value chain performance valuation</td>
<td></td>
<td>0.183</td>
<td>1.975</td>
<td>0.047</td>
<td>3.893</td>
<td>0.007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balanced Scorecard performance evaluation</td>
<td></td>
<td>0.196</td>
<td>3.137</td>
<td>0.048</td>
<td>4.083</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial perspective performance evaluation</td>
<td></td>
<td>0.141</td>
<td>1.762</td>
<td>0.086</td>
<td>1.639</td>
<td>0.071</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The customer's perspective performance evaluation</td>
<td></td>
<td>0.174</td>
<td>2.625</td>
<td>0.068</td>
<td>2.558</td>
<td>0.007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal processes perspective performance evaluation</td>
<td></td>
<td>0.348</td>
<td>3.385</td>
<td>0.056</td>
<td>6.126</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth and learning perspective performance evaluation</td>
<td></td>
<td>0.170</td>
<td>2.610</td>
<td>0.074</td>
<td>2.297</td>
<td>0.008</td>
<td></td>
<td></td>
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<td>Balanced scorecard marks performance evaluation</td>
<td></td>
<td>0.196</td>
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<td>0.071</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Figure 4 below has depicted the relationship between the two parameters of the two independent variables with performance evaluation variable. It manifests the regression paths and the beta coefficients above the one-way arrows with the critical ratio of 1.96 as shown in Table 3. Figure 4 shows the regression paths. This result indicates the significance of the regression path. Therefore, the significance of the beta coefficients of the two value series variables and the balanced scorecard indicates the moral effect of each other in the performance evaluation variable, except in the case of financial perspective.

Figure 4. Regression paths showing the relationship among the dimensions of the value series variables, the balanced scorecard, and the performance evaluation variable.

Conclusion

The analysis of the responses gathered concludes that a need arises for appropriate and integrated measurement systems and strategies oriented toward improving and evaluating performance. Results inferred that the Balanced Scorecard has a significant impact on the planning and control of the organizational performance through the establishment of a simple
framework and effective performance measurement. It can be truly strategic management tool and not just unpretentious performance evaluation system.

The organization can assess each perspective from the view of the Balanced Scorecard through its work and integration with value chain activities. These two aspects work together to perform operations of the organization appropriately and facilitate measurement and evaluation of the performance, considering that the value chain and the balanced label card are proven to add value to the organization and the needs of the customers.

The financial and customer perspectives are commensurate with the needs of customers through the core activities of the value chain, such as marketing, advertising, and sales, as directed to these activities in a manner. Moreover, the market leads to adding value to customers and the organization and provides access to appropriate organizational performance. The perspective of internal operations is linked to basic and support activities. This perspective works with incoming logistics activities, operations activities, infrastructure, and human resource management. As the economic integration processes are carried out through the perspective of internal operations, its work with other operational activities is essential. Moreover, the growth and learning perspective is connected to the core activities and support of technology, human resource management, internal processes, and marketing and sales. In summary, using the value chain and the balanced scorecard enhances the management and evaluations of organizational performance. The Balanced Scorecard, as a performance evaluation method has become an important system management tool in tourism businesses and also in hospitality industry operations. Tourism related businesses are generally contributing to four dimensions of note namely, financial scope, customer scope, the inner workings of the process and also the additional dimension of learning and development management practices. Consequently, performance management is critical in order to achieve success. It is thus becoming an essential necessity to measure performance and compare performance with the other tourism business sectors. Many global managers in tourism and also hospitality enterprises strongly support the probable practicality of the Balanced Scorecard in their industry.

Nomenclature

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>β</td>
</tr>
<tr>
<td>T</td>
<td>Test t</td>
</tr>
<tr>
<td>SE</td>
<td>Standard error</td>
</tr>
<tr>
<td>CR</td>
<td>Critical ratio</td>
</tr>
<tr>
<td>Sig</td>
<td>Scientific</td>
</tr>
<tr>
<td>R2</td>
<td>Explanation and definition of coefficient (connection square)</td>
</tr>
<tr>
<td>F</td>
<td>Test f</td>
</tr>
<tr>
<td>P</td>
<td>Complete statistical (significance)</td>
</tr>
<tr>
<td>β</td>
<td>P coordinates of effect amount</td>
</tr>
<tr>
<td>Df</td>
<td>Degree of freedom</td>
</tr>
</tbody>
</table>

References


Martin, J. G. (2005). Synergising the balanced scorecard and the value chain to reduce wastage within the Western Cape education department (Doctoral dissertation, Cape Peninsula University of Technology).


