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La gestión del Centro Universitario Municipal desde la herramienta de Cuadro de Mando Integral

The management of the Municipal University Center from the Balanced Scorecard tool

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Resumen

El artículo aborda cuestiones teóricas referentes al cuadro de mando integral como herramienta para la gestión en los centros universitarios municipales en Cuba, y como piedra angular para el perfeccionamiento del proyecto estratégico universitario. El objetivo es proponer indicadores claves del cuadro de mando integral para el desarrollo de sus metas financieras, de impacto social, procesos internos, así como la formación de pregrado y posgrado, imbricado en el desarrollo de la localidad y en el cumplimiento de su misión social. Este proceder conecta el rumbo estratégico de la organización con sus procesos sustantivos para una correcta toma de decisiones. En la realización de la investigación se utilizaron métodos teóricos y empíricos.

Palabras clave: Cuadro de mando integral; Gestión; Centro Universitario Municipal; Desarrollo local.

Summary

The article addresses theoretical issues related to the balanced scorecard as a tool for management in municipal university centers in Cuba, and as a cornerstone for the improvement of the university strategic project. The objective is to propose key indicators of the balanced scorecard for the development of its financial goals, social impact, internal processes, as well as undergraduate and graduate training, imbricated in the development of the locality and in the fulfillment of its social mission. This procedure connects the strategic direction of the organization with its substantive processes for correct decision making. Theoretical and empirical methods were used in conducting the research.

Keywords: Balanced scorecard; Management; Municipal University Center; Local development.

Introduction

The constant development of society and production systems, leads companies to be more efficient in the processes of planning, organization, management and evaluation, with in-depth analysis of their praxis, as the environment becomes more competitive and changing.

In this order, the company in its management to create, develop and achieve goals, relies on institutions such as the university, necessary to coordinate the work of people and material resources in pursuit of common goals. In this sense, the United Nations Educational, Scientific and Cultural Organization (UNESCO) stated that "In the context of globalization and knowledge economies, higher education in its role of production and dissemination of knowledge is recognized as an essential driving force for development [...]" (UNESCO, 2009.p.6).

On an international scale there are several studies related to the subject, the following stand out: (Peters & Pfaff, 2008; Martínez, Tanagra, Oyarvide, Rosales & Bustos, 2019) which highlight the necessary unity between business management - university, as the pillar to know its evolution and achieve success in the short and long term, according to the established planning and the fulfillment of the outlined objectives. The principles that govern this operation; its inputs and outputs from a systemic approach, and the stages to follow, allow the dynamization and strengthening of the interactions between both actors of local and national development, a necessary process for the management of the university-enterprise relationship.

Given the current crises the world is going through, new challenges are assigned to the university in the fulfillment of its social mission and the implementation of modern management approaches that allow it to fulfill its objectives efficiently and effectively. On a national scale, several authors (Chacón et al. 2017; Núñez, 2021), who emphasize the need for the link between universities and the environment in which they develop, pondering the role of management as a tool for their evolution and development, give an account of this on a national scale.

The interest in the matter is further manifested in the Guidelines of the Economic and Social Policy of the Party and the Revolution, approved at the VI Congress of the Communist Party of Cuba (2011), as a result, in 2015 all higher education centers are integrated, and the Municipal University Center (CUM) appears in the territories as part of the strategy of integration of Higher Education Institutions outlined by the Ministry of Higher Education (MES), with the explicit objective of contributing through its management to local development.

Thus, a new stage begins in the integration of processes and management control, which as a result establishes collaborative links between the university at the local level and the structure of the municipal government that leads to the training of managers and technical staff from science, in order to think and work together for the transformation of the locality.

The CUMs constitute a new organization for the benefit of the locality, which forces a new look at the potentialities for management. Hence, it is stated that: "The government decides the integration of Higher Education in the municipality to favor the continuous and homogeneous improvement in the training of professionals to the problems of the territory" (Ministry of Higher Education, 2011, p. 13).

The municipality constitutes the local society and legally constitutes the primary and fundamental political-administrative unit of the national organization; it enjoys autonomy and its own legal personality for all legal purposes, with a territorial extension determined by necessary neighborhood, economic and social relations, of its population and interests of the nation, with the purpose of achieving the satisfaction of local needs (Núñez and Fernández, 2021).

The existence of these university institutions at the municipal level is justified by the need to associate it permanently with the development of the territory. However, in the literature analysis (Reyes, 2015), it highlights the existence of certain descontextualization and adjustment of management in relation to the dynamics that encloses the development of the locality, largely characterized by the extrapolation of typical models of central universities. This being so, it reveals the need to design and evaluate the management control systems of universities, considering the process approach as a fundamental tool for continuous improvement and university excellence, where the balanced scorecard (BSC) connects the strategic direction of the organization with its processes, through indicators for the deployment of its perspectives: financial, training and growth, internal processes and customers.

Due to the above considerations, the scorecard becomes an essential tool for self-control, measurement and unified visualization of the organizational strategy. Hence, the purpose of this article is to provide indicators as part of the balanced scorecard for the improvement of the management of CUM El Salvador, leading to local development.

Development

Materials and methods

The theoretical and empirical methods used were fundamental in conducting this research, including: analysis-synthesis, induction-deduction and document analysis, which made it possible to produce information and reach conclusions.

The balanced scorecard is a very useful accounting tool to measure the evolution of an organization's activity from a strategic point of view and with a general perspective; it allows improving the effectiveness of management and the performance of individuals, thus constituting an instrument for making accurate decisions.

It is considered a necessary option within the management information system, and becomes the tool par excellence to support the relevant decision-making process.

The concept of balanced scorecard comes from the French term tableau de bord, which literally means something like dashboard or instrument panel. Its origin dates back to the middle of the 20th century, although it was around 1948 when it appeared in the business world in the United States.

In the 1980s, this term became much more doctrinal than practical, due to the stable trend of the environment, since decisions were made in a low-risk environment. Today, it is oriented towards five essential ideas: to become a support tool during the decision-making process; to be applied and interpreted simply and effectively; to propose financial as well as non-financial indicators; to adapt to environmental conditions; and to achieve motivation at all levels of management.

It is important to highlight the relationship between the balanced scorecard and the rest of the management control tools, as they allow the generation of numerous and useful information. This favors the company in the conformation of a new concept, thus becoming a fundamental part of the decision-making process.

The balanced scorecard makes it possible to face the challenges that arise in the business environment and produces a significant change in the role of human capital within the organization. It also makes it possible to balance the financial and human capital management of a company and is essential if a business strategy is to be implemented.

The balanced scorecard is a response to the way of dealing with information coming from the environment and that which the organization cannot control. In summary, the references would come from the different areas of management control, providing only the relevant information.

In each case and situation, the relevance with the profile of the person responsible for the balanced scorecard must be considered. This is accentuated at the highest level of responsibility within the corporate hierarchy. This particularization must be based on the knowledge of the possibilities and restrictions of any tool, which leads to its careful and guaranteed use.

On the other hand, when qualitative indicators are incorporated into the balanced scorecard, in a certain way, they seem to be closer to action than those of a financial nature. Indeed, it is the nominal indicators that will make it possible to perceive what results might be achieved. Other taxonomies of indicators that are of great interest, such as result and process indicators, external and internal indicators, monetary and non-monetary indicators, should not be overlooked.

The balanced scorecard should be oriented towards the reduction and abstract of concepts; it should become a tool that, together with the support of new information technologies, offers simple, synoptic and effective information for the decision-making process.

From the perspective of elaboration, those responsible for each of the balanced scorecards at the different levels of management must take into consideration, among other aspects: to present only that information that is truly relevant, indispensable and irreplaceable. The nature of the pyramidal structure must be considered and the indicators must be added to it until the most essential ones are reached, so that each person in charge is assigned only what is related to his/her management and objectives.

These patterns of operation are convenient and logical; however, we should not lose sight of the objectives to be achieved through the balanced scorecard for management in the locality, among which the following can be considered:

It has to be an outstanding informative means, which allows eliminating bureaucracy in the transmission of information in the company. It must be a diagnostic tool, where the quality and quantity of information is selected to highlight those parameters that are not going according to plan.

It must promote dialogue among all the components. It must be a reason for change and continuous training in relation to the different behaviors of those in charge. And it must facilitate the decision-making process, where the causes of deviations are analyzed and solutions to problems are provided.

The balanced scorecard is a tool that acts under exception mechanisms, that is, it works on critical processes to obtain extraordinary solutions capable of regrouping internal processes and defining new strategies on the achievements reached in a given period. The results are then reported and communicated to the entire organization in order to show employees the critical objectives and generic strategies that will guide all levels, so that they are inserted in a common goal.

In the development of the process, after having informed the members involved in the management of the balanced scorecard, the actual planning is carried out, where the operational objectives, strategic initiatives, resource allocation and goals to be met during the process are established. As a final stage, the training of the subjects involved in the design and application of the system is required, since it is through this stage that the skills and culture for the proper management of the system are configured.

The balanced scorecard is not by itself an improvement tool, it is a strategic management system that requires individuals to be successful, given this need, the training and development of groups for the administration of the process is of utmost importance for its implementation.

The concept of the balanced scorecard represents a system for measuring business management based on four perspectives or dimensions, from which it is possible to acquire an integrated and balanced view of a company's performance in relation to its strategic planning process.

The Commercial Perspective identifies and analyzes customer and market segments and measures the value propositions in which the company will compete, evaluating customer needs, satisfaction and loyalty levels, their purchasing specifications and profitability in order to align products and services with their preferences.

This perspective defines the processes of marketing, operations, logistics, products and services, it is determinant for the good development of management as it is related to time, quality, costs and satisfaction "satisfied customer is the one who prefers you above all things, [...] his loyalty depends only on his level of satisfaction", according to Drucker, quoted by (Hermida and Serra, 1992).

Another perspective of this tool is the Internal Process: this defines the value chain of the processes necessary to provide customers with solutions to their needs. The objectives and indicators of this perspective are derived from explicit strategies to meet customer expectations. Some of the main internal measures are related to factors affecting production cycle times: quality and productivity.

The financial perspective is also important, as it links the objectives of each business unit to the company's strategy. It serves as a focus for all the objectives and indicators of all the other perspectives. It relates directly to liquidity, solvency, indebtedness and profitability. This is the one that most companies have traditionally used to measure performance.

The perspectives introduced by the balanced scorecard concept, when it comes to creating additional advantages, can make the difference in the development of local management, where information is one of the key factors for a company to stand out from the generality. Knowing the company financially is very useful, but it is meaningless if you do not understand where those results come from, if you do not know why the results were obtained, or worse, why they are not achieved.

To achieve sustainable advantages, it is necessary, among other factors, to balance financial management with the company's intangible capital.

The representation of innovation and learning is vital, because it is in this perspective where the true potential of human capital for the generation of added value is analyzed with the use of interrelated technologies and information systems.

This orientation contributes to the achievement of the necessary balance that must exist between financial and non-financial indicators in the development of organizational management, since in today's convulsive and changing environment, the importance of intellectual capital in the creation of sustainable competitive advantages must be fully recognized, making innovation and learning key processes in constant evolution.

This aspect provides the necessary drivers to achieve results from the above perspectives. The performance of the personnel is reinforced with motivating agents that stimulate their interests towards the company; in addition, the capacities of the employees and of the information systems, the organizational climate to know the state of motivation, the initiatives of the personnel, among other aspects of vital importance, are measured.

The paradigm of successful organizations lies in the satisfaction of its workforce, the management of technologies and information systems, to finally create added value. This is an important condition for involving workers and for them to understand the logic of the fundamental activity developed by the organization for local management, in such a way that their contribution to the creation of added value is clearly seen.

From an integral point of view, the relationship between the perspectives should be analyzed starting from the need to have in the organization a capable and motivated staff to perform their functions and be aware of the importance for the achievement of global and local objectives, under these premises then it will be able to develop quality products and services capable of satisfying the most demanding customers.

As an abstract, the balanced scorecard is the cornerstone for the new strategic management system at a primary level of the company, which integrates the functionalities related to physical and intangible assets, through the systematic work and the corresponding measurements made on the variables that best interpret the strategic objectives.

On the other hand, the balanced scorecard is much more than a measurement exercise; it is a management system capable of driving major progress in such critical areas as products, processes, customers and market development.

1.1 The balanced scorecard and university management at the local level

The improvement of Higher Education and its substantive processes is a priority to improve the quality and effectiveness of the teaching-educational process in order to increase efficiency and design training and research programs that are in line with the needs of the country's economic and social development.

This was stated by the Minister of Higher Education in Cuba, in the inaugural conference of the X International University Congress "The idea of an innovative university emphasizes the need to build institutions capable of permanent transformation, able to meet the great challenges of our time and our societies" (Alarcón, 2016, p.16).

In this sense, Cuban universities are involved in constant processes of transformations, to respond to the demands of society, so the use of modern management approaches becomes a necessity to develop university management of excellence, which was reaffirmed in the opening conference of the VII International Congress of Higher Education University, where it was stated ".... our priority is aimed at advancing in the improvement of the education of new generations of Cuban professionals, in the certainty that the academic excellence of the Cuban university is measured through the verification of its social relevance". (Díaz- Canel, 2010, p. 3)

The management of CUM El Salvador in line with the purposes expressed above, assumes that its mission is to accompany the political, economic and socio-cultural development of the municipality, and meet the demands arising from the process of updating the economic model, through the comprehensive training of professionals committed to our social project and its sustainable development; ensuring the promotion and development of science and innovation.

From the strategic direction, the CUM proposes to strengthen the university-society relationship, in correspondence with the strategies of territorial and local development, with emphasis on the social, political and economic transformation of the communities and in business management.

Thus, the balanced scorecard for the local management of the CUM was designed based on the selection and design of indicators capable of relating the objectives with the internal processes and establishing the way in which impact will be measured.

As a result of the process, indicators are proposed from the perspectives of social impact; internal processes; training and growth and financial perspective, taking into account the elements defined by the MES, the University of Guantánamo and the National Accreditation Board.

Social impact perspective

Objective: To assess the response of the CUM to the needs of the territory.

Indicators

- External recognition of the economic-financial management of the CUM.
- Satisfaction of the territory with the extension activity developed by the CUM.
- Satisfaction with the quality and quantity of new professionals incorporated into society.

- Level of fulfillment of the demand for professional training and postgraduate studies in the municipality.
- Satisfaction with the scientific and technological development of the governance system based on science and innovation.
- External recognition for the information management, communication and informatization developed by the CUM.
- Committed and satisfied human capital.
- External recognition for the management of international academic and scientific projects, networks and partnerships.
- Number of international academic and scientific networks and associations in which the CUM participates.

Internal processes perspective

Objective: Manage university processes to meet the demands of the territory. Indicators

- Percentage of international projects that contribute to local development.
- Percentage of PhDs in the full-time faculty.
- Percentage of university professors that in the fulfillment of the political-ideological work aspect of their work plan are evaluated as Excellent and Good.
- Percentage of professors and researchers in the faculty with higher teaching and scientific categories.
- Percentage of technologies transferred to the Strategic Sectors.
- Number of courses, diploma courses and actions for the preparation of cadres and reserves in the workplace, available in virtual teaching-learning environments.
- Number of computerization and communication projects for local development.
- Number of courses, seminars, conferences or other activities carried out for the development of infotechnological competencies that contribute to raising the digital culture of teachers, researchers and students.
- Number of training and postgraduate programs related to local development.
- Number of awards obtained as a result of scientific activity.
- Increase in publications with international visibility.
- Number of professors and specialists in the CUM, trained in government management tools and methods using Science and Innovation.
- Number of professionals from the Strategic Sectors in advanced and post-graduate programs.

- Number of professionals enrolled in graduate programs.
- Percentage of accredited careers of those that meet the requirements.
- Percentage of student satisfaction with the quality of the training process.
- Number of higher education graduates.
- Efficiency in the training cycle.
- Number of community projects with recognized impact on local development.
- -Percentage of execution of the capital expenditure budget.
- Number of spaces recognized for the promotion of culture, physical activity and sports in the university community and the communities of the territory.
- Percentage of external audits approved.

Training and growth perspective

Objective: To assess the effectiveness of training and growth actions necessary for the realization of internal processes of excellence in response to the needs of the territory.

Indicators

- Number of training actions related to budget management.
- Percentage of training needs related to scientific and technological development met.
- Programs prepared for further education and postgraduate studies.
- Percentage of activities carried out for the development of infotechnological competencies that contribute to the enhancement of the digital culture of professors, researchers and students.
- Percentage of teachers and managers trained in the use of social and scientific networks.
- Number of programs prepared for the preparation of State and Government cadres and reserves.
- Number of people trained in the management of community projects with recognized impacts on local development.
- Percentage of young people prepared and incorporated into the cadre pool.
- Percentage of teachers and researchers in the faculty with mastery of new resolutions related to methodological work and scientific activity.
- Percentage of teachers trained in management of international projects and local development.
- Number of people trained in working with international academic and scientific networks and associations.

Financial perspective

Objective: To assess the need for financial resources to support the processes to be developed by the CUM.

Indicators

- Financing for international projects that contribute to Strategic Sectors and local development.
- Financing of projects for informatization and communication in local development.
- Necessary budget for scientific and technological development.
- Financing for community projects.
- Current expense budget for repair and maintenance.
- Capital expenditure budget.
- Foreign exchange income.
- Financing for artistic projects associated with the promotion of environmental care and quality of life.
- Contribution of companies to the rehabilitation of infrastructure and technology.

Conclusions

The analysis of the theoretical issues concerning the strategic management of the CUMs in Cuba, allows concluding that, although attention is paid to the contribution of these university institutions to local development, there still persists a management culture that does not favor this relationship, where the balanced scorecard tool is a cornerstone for the improvement of the strategic system of university management at the local level. This instrument of continuous improvement facilitates to know the concrete situation in which the organization is, by contributing effectively in the global vision of the entity, both in the medium and long term for the adequate and accurate decision making. The procedure has potential applicability and relevance for the improvement of the management of El Salvador Municipal University Center and local development.

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