

## The BSC as a measurement and tool of performance indicator in a clinic-hospital

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### ABSTRACT

*Every single organization has, as a goal, to reach the optimization of resources that it has, because of it, to have a plan of its use is essential. Strategic planning is a continuous process based on as much knowledge as possible of the future, this based on results measurement. Regarding measurement, all along history, there have been developed several methodologies and tools where BSC is included, this one has as goal, the formulation of financial and no financial indicators, which allows to evaluate activities performance mixing goals and critical factors of success through reach institutional mission and vision. Indicators implementation and evaluation helps to represent periodically organizational performance and adds effectively on decision making to implement effective strategies.*

**KEYWORDS;** *-Key performance indicator, Critical factors of success, Institutional goals, Strategic planning*

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Date of Submission: 05-06-2019

Date of acceptance: 20-06-2019

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### I. INTRODUCTION

Organization performance is essential to reach planned goals and obtain as a result, success on business vision; we want to understand this as the top goal in an organization. In this context, success measurement has a critical role, because it includes following advances on strategic achievements, because of it, it is necessary having tools to face correctly, necessities on tracing and evaluation, that bring indicators that allow modify, if necessary, strategies path. This investigation represents has the object to develop the Balanced Scorecard, according to teachers Kaplan and Norton (2001) this tool as principal object “transform a business strategy in action and results” using goals alignment of all perspectives is possible to see on a business: financially, processes, clients and strategy capabilities. The BSC adds result measurement indicators of action as financial and no financial indicators, key ones that influence on future results, that came from vision, mission and goals of the clinic- hospital study case.

### II. GRAPH DATABASES

Strategic Planning is the continuous process based on the largest possible knowledge of the future, considering that it works to make decisions on present, which includes future risks because of expected results (Drucker 1954), in the strategic planning it is necessary to implement competitive tools as: Just-in-time (JIT), total quality control (TQC), continuous improvement, empowerment, strategic planning, outsourcing, benchmarking, BSC, among others.

In the specific case of this investigation, the tool is used is BSC, James E. (2005) says that purpose of this tool is helping to identify correct indicators aligning them with organization vision and strategies, giving a way to establish goals and to distribute resources for short time planning, to communicate strategies, linking awards whit performance and providing feedback for organizational knowledge. At the same time (Amo, 2011) says that the BSC can be considered as an administration methodology or technique that works as help to organizations on transforming its strategies into measurable, reachable and durable goals between them, achieving that behaviors of key people and organization resources get aligned. The tool has to be flexible and agile because this way will allow that information that is in it can be used fast, easily and on time, then actions that came from it, can be done effectively (Curto, 2012). Activity sequences to end with BSC are mentioned on next diagram I:

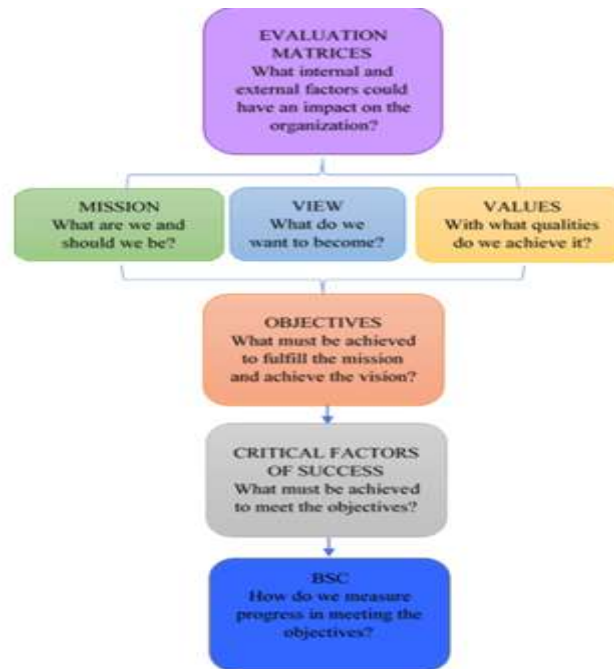


Diagram I. The framework of the BSC, Source: Own elaboration (2019), taken from Martínez D. (2012)

The Balance Scorecard was David Norton and Robert Kaplan answer to the necessity to increase vision of control system from an inside and financial balanced perspective in different ways: financial and non-financial information, internal and external information, as well as information of actual and future results. In order to get this balance they propose to evaluate the organization performance on the base of four perspectives that showed the organic behavior of organizations: financial perspective, knowledge and growth perspective, internal processes perspective and client perspective. Due to it, it is possible to denote that this tool allows sizing organizations performance because, not only, sizes financial indicators but sizes organizational and departmental goals which make of it an integral and impacts system, provides points of view from all people involved: investors, clients and workers (Valhondo, 2010). Nowadays organizations are in a constant competition and day by day there are new requirements for them, that is why it comes the necessity to size, control and optimize its processes, actually, in Tlaxcala there are 71 businesses that work in healthcare (clinics-hospitals) public and private sector, according to INEGI (2016). In Tlaxcala city there are 7 businesses in this area in private sector, from which there is no information regarding the use of indicators, so organizations do not use a methodology based on clear information that allows to show if the organization is sustainable and/or with success, at the same time it restricts strategies effectiveness that are proposed to strengthen organizational performance.

### Methodology – development

- Initially it is conformed a work team conformed by organization members which reason is to look for opportunity areas through the startup of the tool “Focus groups” in order to establish the actual situation of the business, internally and externally (FODA), evaluating every single factor that can impact on continuous improvement of the organization.
- Once internal and external factors are identified, they will be weighed so it will be possible to know the priority order; using EFE matrixes (Evaluation matrix of external factors) and EFI (Evaluation matrix of internal factors).
- With results we got from matrixes EFE and EFI, it is shown in a map the strategic goals, considering those factors that have more impact. Goals allow accomplishing hospital mission step by step.
- Then we do mission, vision and organizational values; these once are done from weaknesses, threats and opportunities that were identified in matrixes EFE AND EFI. In order to accomplish organizational goals, it is essential to have inductor objectives, which are linked to success critical factors (FCE) that is why we look for them.
- Finally we do the BSC with the reason to show objectives, goals and optimal indicators to evaluate the organizational performance.

III. RESULT VIEW

In order to know actual situation of Del Angel clinic-hospital, we do an analysis of internal and external ambient in which is involved, this one is done by using FODA tool as well as matrixes EFE and EFI.

OPPORTUNITIES	RELATIVE WEIGHT	QUALIFICATION	WEIGHING
Obtain certifications and / or accreditations by national system of certification of medical care establishments (CMCSS), Joint Commission international (JCI), ISO certification, OHSAS certification, etc	0.05	1	0.05
Establish agreements and / or strategic alliances consulting, insurance, government and business	0.15	2	0.30
Take advantage of the importance of maintaining and safeguarding health as a basic need	0.05	3	0.15
Take advantage of COFEPRIS permits to launch advertising campaign	0.20	1	0.20
Updating of medical equipment according to technological advances	0.05	3	0.15
	0.5		0.85
<b>THREATS</b>			
The existence of public clinics and hospitals	0.10	2	0.20
Rigidity in legislative regulations	0.05	3	0.15
Private medical centers with the most infrastructure	0.20	2	0.40
Economy of the Tlaxcalteca population with salaries lower than the national average	0.10	2	0.20
Increase in competitors (creation of new hospitals, both public and private)	0.05	2	0.10
	0.5		1.05
<b>TOTAL</b>	<b>1</b>		<b>1.90</b>

Table 1. Matrix for evaluating external factors, Own elaboration (2019)

In general and according to the results obtained, the rating of the MEFE matrix is 1.90, this rating is below the average (2.5), so it can be denoted that the strategies that the organization currently has do not allow for taking advantage of the opportunities exist, nor do they support minimizing the potential effect of external threats.

Table 2. Matrix for evaluating internal factors, Own elaboration (2019)

STRENGTHS	RELATIVE WEIGHT	QUALIFICATION	WEIGHING
Hospital with plans and permits authorized by federal agencies	0.03	4	0.12
Location in downtown and well connected with city of Tlaxcala	0.05	4	0.20
It has available infrastructure which allows it to have the opportunity to expand	0.03	3	0.09
Large and equipped operating room	0.04	4	0.16
Adequate and necessary equipment for different areas	0.05	3	0.15
Medical and support staff 24 hours	0.03	4	0.12
Personnel with a preparation according to the position profile, with professional, ethical and human quality experience	0.04	4	0.16
Medical specialist staff with a high professional trajectory, (basic specialties such as internal medicine, gynecology and obstetrics, surgery and pediatrics)	0.07	4	0.28
It has support specialists, all of them are distinguished by their high capacity to respond to a medical emergency	0.07	4	0.28
	0.41		1.56

WEAKNESSES			
There is no record or monitoring of the quality offered	0.10	1	0.10
The existence (inventory) of accessories and / or medicines (fixed fund) necessary in each department is not controlled	0.05	2	0.10
It has a cleaning and maintenance program which is not monitored	0.03	2	0.06
There is no training program, nor is case analysis and medical issues	0.07	1	0.07
Lack of administrative, organizational, management and control instruments (performance evaluation indicators)	0.15	1	0.15
The processes and procedures immersed in customer service do not run efficiently	0.05	1	0.05
There is no mission, vision, objectives and strategies (strategic planning) to define the direction of the organization	0.10	1	0.10
It lacks TIC's to improve internal processes	0.05	2	0.10
	0.59		0.73
Total	1		2.29

Making an assessment of the strengths and weaknesses the result of the weighted scores obtained from the MEFI matrix show a negative result for the organization, since they are below the average (2.5) which shows that the hospital clinic is internally weak, and the weaknesses are superior to the strengths. According to hospital necessities identified by the focus group, mission, vision and institutional values are done as follows:

**Mission:** We are an institution that wants to protect health and integrity of patients, assuring humanistic and tender attention through the highest technical-medical knowledge and the latest in technology, we are experts on providing kind and solidary service with the highest quality and ethic level that allows us to obtain full satisfaction and integral health of our patients.

**Vision:** To be an institution that stands out by bringing a service with the highest quality standards, using as a base of performance continuous improvement on its processes and services to preserve health of people through a humanistic treatment and patient safety, in order to reach the highest esteem of the community where we serve so we can be market leaders in healthcare.

**Values:**

- Empathy: Offering a service which basis is patient sensitivity and integrity.
- Honesty: Doctor provides complete and honest information to patients and family members so they can be able to take decisions in the scope of autonomy.
- Ethics: Includes integral care, no discrimination and confidentiality regarding information provided by patient.
- Respect: Our employers have the aptitude to recognize, accept, appreciate and value all attributes of our clients and its rights.
- Responsibility: Every single act we will do, will be done to take care of health and integrity of the patient and family members, setting first clear information.
- Solidarity: We do teamwork, with justice and humanization to provide the best service to patients and to all people in our community.

Next map shows strategic objectives, and are a consequence of factors with higher impact that were identified in matrices EFE and EFI through weights, objectives are classified according to perspectives of BSC; Knowledge and growing, customer satisfaction, internal processes and finance.



Diagram II. Strategic map of institutional objectives, Source: Own elaboration (2019)

Once strategic objectives are established, we formulate a series of critical factors of success (FCE) for each of them, understand these as product characteristics (service) that are highly valued for a group of clients and in which ones, as a consequence, organization has to have success to overcome to competitors (Johnson and Achols 2002).

In order to FCE can be strategically manageable it is indispensable identifying those indicators that can be used for its measurement and evaluation (Thompson and Strickland, 2004). FCE, institutional objectives and indicators are closed linked, because allow evaluate compliance of established objectives to better the rganization

Strategic objectives	Critical factors of success	Indicator
Achieve institutional growth and development through financial equilibrium	Increase utilities	Net profit margin
	Reduction of operating expenses	Selling expenses by period
	Improve financial performance	Cost effectiveness
Be a strategic ally of insurers and medical consultations	Make strategic alliances	Number of strategic alliances
Increase coverage in the provision of this service	Increase patient catchment	Growth in sales
		Growth of the billboard of clients
Increase the level of satisfaction through continuous improvement	Reduce non-conformities	Number of non-conformities
	Decrease claims	Number of claims / complaints
	Improving customer satisfaction	Overall satisfaction
Adopt clinical administration, planning and management processes	Standard Operating Procedure (SOP)	Execution non-conformities
Strengthen the level of performance in key processes	Efficiency in key processes	Efficiency
	Effectiveness in key processes	Rate of return
Achieve greater diversity in the provision of hospital services (human talent and infrastructure)	Increase billboard of medical specialists	Adequacy of the resources demanded by the community
Achieve the development of human talent, its motivation and adherence to institutional purposes	Train the staff	Monthly hours used in training
	Effective training	Average obtained in the evaluation of the personnel

performance, then, we present the critical factors of success and its indicators.

Table 3. Compendium of BSC, Own elaboration (2019)

#### IV. CONCLUSION

Based on the evaluation of EFE and EFI matrices it is possible to denote that organization presents general shortcomings and actually its strategy do not answer to the demanding needs, internal and external ones, so that we develop the methodology tool called BSC, this one allows to run a system of indicators that will work to evaluate and measure organizational performance of the clinic-hospital, it is important to develop that business study case do

not have with organizational objectives so in this investigation we provide a direction to it based on BSC and taking as starting key point to external and internal factors according to weights that have more impact nowadays.

According to the analysis of the information showed in this investigation it is possible to conceive next: the continuous change in the world has created as a result that new administration at general level has had adapted to this fast and new transformation, looking for this way that the financial and operational results can be efficient and addressed to managerial decisions on planning and control of the business applying competitive strategies, facing this changes, it is possible to understand that it is necessary the use of a tool that help to identify and verify the strategies needed to follow to reach the vision, as well as the accomplishment of specific objectives, which can be measurable and reachable with a group of indicators that show in real time the business perform. In the specific case of the business, study case, we look for, by using, the BSC tool to achieve the integrated tracking through the combination of the elements of strategic management and the behavior control of an organization on short, medium and long time, based in objectives determination with indicators and initiatives in a strategic way.

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Mitsy Vianey Altamirano Utrera" The BSC as a measurement and tool of performance indicator in a clinic-hospital" The International Journal of Engineering and Science (IJES), 8.5 (2019): 69-74