

THE REALITY OF THE UNIVERSITY PUBLIC MANAGEMENT AND THE NEED FOR AN INTEGRAL MANAGEMENT MODEL

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Abstract

Nowadays, the current management of state Universities has not been able to lead changes due to the multiple economic and budgetary obstacles that do not allow it to manifest a new university management policy in accordance with present-day national demands. Hence, any initiative in this regard, requires the joint effort and teamwork of authorities, professors, students, administrative and services staff in order to achieve the triad training of human resources, knowledge generation, and the creation of respectful social values under a basis of social ethics.

It is precisely in this context, that the Ecuadorian Public University must seek to validate itself within a defined process of management, guaranteeing quality from the creation and the spreading of knowledge; the commitment to motivate change, that transcends and creates the basis for a university that leads the future and seeks a sustainable development for the towns and their actors, For this reason it is necessary to structurally redesign the university management, making it integral, basing itself on quality principles that are the foundation of the development of teaching, as well as the strengthening of the rest of the functions and processes of the institution. This way, it may assume a real commitment to the country in the search for solutions to relevant situations; representative of the national reality, it will define this management as a priority objective, proposing coherent ways to achieve this.

This research focuses on the analysis of the public universities in the Area N ° 6 of Ecuador and its organizational management, considering the management of those who run it, that is, the people who through their daily tasks, create and give added value to the processes of the organization, with the purpose of determining the existence of a defined management model, that intends to solve problems of economic, administrative and social order with an analytical and integrating instrument that facilitates an organizational scheme and directs the operating through corporate governance for the proper management and control of economic, material, technological and human resources. These aspects have ceased to be considered as a priority objective, and have caused these institutions to lag behind their management models in simple activities and tasks developed and focused on solving immediate problems of which the foundations have not been established with regards to a flexible, versatile and universalist university management that faces current and future challenges.

The research approach is mixed: (qualitative and quantitative). The results of this research target is to determine: a) if the current management system applied in the state universities in the Area N° 6 of Ecuador responds to a structured and formal management model. b) To demonstrate if the management model used in the state universities in the Area N ° 6 of Ecuador, is organized considering current regulations and requirements. c) A formal integral management model which will provide adequate tools for compliance and control of processes, activities and tasks in the state universities in the Area N ° 6 of Ecuador, and will promote their continuous improvement.

Keywords: state universities, university public management, integral management model, quality.

1 INTRODUCTION

In Ecuador, the Public Institutions of Higher Education are autonomous in regards to the functioning of its management in accordance to the needs and demands that each one of them have, however, this does not exempt them from being monitored and evaluated by the corresponding state agencies such as the Council of Assessment, Accreditation and Quality Assurance of the Quality of Higher Education (CEAACES) [1] through the “Ley Orgánica de Educación Superior (LOES)” [2] in such a way that their work is governed by certain parameters that regulate the proper development of their activities.

Currently in zone N°6 of Ecuador there are two recognized state universities, also with a traditional model which contributes to its management, however, the need for an Integral Management Model that becomes a tool that allows the articulated operation of an institution in all its scenarios considering their advantages and disadvantages and meeting the needs and expectations in their development context, establishing a continuous improvement in their processes.

To cover this need and meet institutional objectives, this research includes the diagnosis of these institutions' need for an integral management model based on the organizational environment in which the higher education institutions of the zone No. 6 of Ecuador operate, as well as the contexts and requirements of the environment, duly informed in versatility and flexibility, which promote the quality worldwide such as the EFQM model (Model of the European Foundation for Quality Management) [3], and reinforces the areas according to the diagnostic institutions that need greater attention. This allows its correct functioning and strengthening in order to achieve continuous improvement.

Management models

Starting from the fact that an integral management model is an environment in which all the internal and external parts of an organization interact, it is a broad field that include the integrated management systems in such a way that the operation of a company, institution or entity operates on a par between them and the other parties involved which shows that the holistic tool that shapes the correct operation of a company is the integral management model, instead of the comprehensive systems management [4].

Over time, the proposals for the implementation of management models have been mixed trying to provide answers to the most important problems of organizations in their fundamental areas such as: organizational structure, leadership, responsibilities, resources, processes, among others, which due to a number of demands of the environment in which they operate, have undergone modifications. All the existing models are related to each other, because they aim towards the same objective that is to contribute to the achievement of excellence in management, being able to vary in form, but not in the background, that is, its versatility is directly proportional to the adaptability they have with the different scenarios presented by the environment in which they are applied.

From there on, after a rigorous analysis of the different types of management models, those that adapt better to the reality investigated have been retrieved, in this case, public institutions of higher education.

Management models applied to Institutions of Higher Education

The main characteristics of a management model are versatility and flexibility to be able to fit into any organizational system, hence the professional's ability to adapt it according to his/her skill in the involvement of parameters and simulation of real or hypothetical scenarios to anticipate possible risks and correct them in a timely manner.

With the origin of several management models of excellence that arose, mainly to face problems in different companies worldwide, we cannot leave aside the structural base that similarly responds to problems of organizations of any kind, so the area was also predestined to follow the guidelines of these organizational guidelines which is why several higher education institutions at the global level have appropriated this knowledge to carry out a survey of their management and bring their organizations to standards of excellence, which is why there are many universities that contemplate management systems in different phases of evolution.

The Malcolm Baldrige Model [5], is one that allows the development of criteria that set its own goals and strategies to achieve them through a plan of activities at the university regardless of the size and type of higher education institution, since it analyzes, evaluates and controls them based on the same principles, focusing on the creation of value according to the organizational culture, the development and quality of its processes.

The model strengthens several factors of the university basing itself on education focused on the individual and collective learning, appreciation of human talent in all areas either teaching, administrative or support departments, reaction capacity and immediate versatility to different problems, development of social responsibility and constant monitoring of results to integrate the systems of higher education institutions.

The models of excellence proposed by FUNDIBEQ (The Ibero-American Model of Excellence in Management) [6] and by the EFQM (European Foundation for Quality Management), have also

encouraged not only business organizations but also universities to apply their proposals in their management systems, and consequently have launched structured guides with criteria molded towards the educational field.

For example, the Ibero-American Foundation for Quality Management has within its program of development of organizations with intentions of achieving ISO standards [7] through the FUNDIBEQ excellence model to several higher education institutions in different countries such as the Educational Group Marín in Argentina with the Higher Institute of Teacher Education "Carmen Arriola de Marín" that has achieved ISO 9001: 2015 certification for repowering of its management system through a quality manual that sets forth the Teaching Processes, Administrative Technicians and support.

In Chile, Arturo Prat University, has also taken the guidelines of the Latin American model as a point of reference revealing its application in its institutional educational model that reveals a complete structuring of the institution at a directive, strategic and operational level, reaching the evaluation and continuous learning.

Francisco Gavidia University [10] in El Salvador, is also under the same guidelines, which exhibits its ISO quality certification as a competitive advantage of its organization, which allowed it to improve its services by debugging its processes through a quality policy causing an effect of progress in the system. Teaching and learning supported in their tasks, activities and support actions embodied in an integration of quality, environment and social responsibility.

Following the same theme is the Universidad del Pacífico [11] in Peru that shows an advanced work in its proposal of training model that presents an articulated system in which aspects such as: teaching, students, externalization of knowledge for social welfare and leadership converge in all the processes.

Finally, one of the most complete adaptations of the model is Tecnológico de Monterrey [12], which announces a strategic plan projected towards 2020 that is highly detailed at the level of processes, organizational structure, responsibilities and strategic initiatives.

Another of the models of great acceptance is the EFQM model with representatives such as the State Agricultural University of Stavropol of Russia [13], that is shown as one of the 100 universities in its country applying quality criteria on 3 directed fundamental pillars: the first focuses on talent that seeks to attract the involvement of outstanding students and scientists to promote the development of programs and the internationalization of knowledge. The second one is the variety of resources in the search for different sources of financing through additional services or specialized consultancies and technology transfer. Finally, the development of an optimal management built through adequate leadership, delegation of authority based on motivation, timely communication and access to necessary resources without restrictions.

Applying the same model is the John Moores University of Liverpool [14] in the United Kingdom, which has been characterized by its extensive development in the area of strategic relationships by achieving various alliances and agreements that have led to worldwide recognition for its convenient management to guarantee a dual academic and practical training that is reflected in its strategic plan and its application which has allowed its students the ease of incorporation into the workplace more easily.

In this way it is shown that models of excellence have helped to evolve higher education institutions. Any of the types of management models detailed above are fully compatible with a public higher education system since it meets all the conditions to be considered a measurable organization with this type of instruments. The most important thing in this evaluation process is to adequately address the criteria and sub-criteria of the integral management models to the educational system so that it becomes operative and functional.

2 METHODOLOGY

In this analysis, management was measured in a macro approach using the criteria of Leadership, Planning and Strategy, Personnel Management, Resources, Processes, User Satisfaction, Staff Satisfaction, Impact on Society and Results in the Institution contemplated in the EFQM model. through

9 questionnaires adapted to educational institutions and taken from the methodology proposed by Martín Fernández (2001) [15].

For the processing of information it was necessary to establish scoring and assessment parameters for the different criteria and variables considered as follows:

P = Score awarded by the upper hierarchical level

A = Valuation granted by external consultants

To determine the value that corresponds to each question, the formula was applied:

$$\mathbf{Total} = P \times A$$

In order to set a score for each criterion, an average value was established according to the following formula:

$$\mathbf{Average\ value} = \frac{TP}{NPC}$$

Being:

$$\text{Total Points (TP)} = \Sigma (P \times A)$$

NPC = number of answered questions

The procedure indicated was applied to each one of the criteria determining. Once the same procedure was performed for each criterion, the compliance percentage was determined for each element of the questionnaire proposed in relation to the EFQM Model.

It is necessary to establish the level of contribution of each question in the percentage granted to each criterion granted by the EFQM, for which the following formula was applied:

$$\mathbf{Degree\ of\ contribution\ per\ question} = \frac{\text{Percentage awarded by criteria of the EFQM model}}{\text{Number of question of each criterion}}$$

In virtue that each criterion is composed of sub-criteria and these in turn contain different questions, to determine the level of compliance of each sub-criterion, we proceeded to establish goals by sub-criterion:

Goal of the subcriterion

= Σ of the degree of questions' contribution that makes up the subcriterion

Once the goal was established, the degree of compliance of each question was calculated in terms of the score obtained in the evaluation of each sub-criterion.

$$\mathbf{Compliance\ by\ sub_criterion} = \frac{\Sigma (P \times A) \text{ reached in each subcriterion} \times \text{Goal of the subcriterion}}{\Sigma (P \times A) \text{ maximum achievable of each sub - criterion}}$$

To determine the total compliance of each criterion, the percentage reached in each sub-criterion was added, and this result must coincide with:

Percentage of compliance by criterion

$$= \frac{\text{Average value} \times \% \text{ established by the EFQM for each criterion}}{4 \text{ (established likert scale)}}$$

Percentage of compliance by criterion = (Average value x% established by the EFQM for each criterion) / (4 (established likert scale))

The sum result shows the percentage of compliance with the management in all its areas compared to the base model (EFQM), and consequently reflects the state of the institution in each of the criteria evaluated.

3 RESULTS

All the calculations and results achieved in the diagnosis in institutions A and B, through the methodology indicated above, are summarized in the following tables and figures:

Table 1: Results University A: Evaluation criteria in relation to the EFQM model

Criteria	University A (Average Likert Scale)	Percentage given by the EFQM	Percentage that represents in the evaluation the University A	Comment
Leadership	2.44	10.0%	6.11%	Above Average
Planning and Strategy	2.38	8.0%	4.75%	Above Average
Personnel Management	2.50	9.0%	5.63%	Above Average
Resources	1.71	9.0%	3.86%	Do not exceed the average
Processes	1.89	14.0%	6.62%	Do not exceed the average
User satisfaction	2.22	20.0%	11.11%	Above Average
Staff satisfaction	2.63	9.0%	5.91%	Above Average
Impact on Society	2.89	6.0%	4.33%	Above Average
Results of the Institution	2.83	15.0%	10.63%	High score
Total compliance:		100.0%	58.93%	

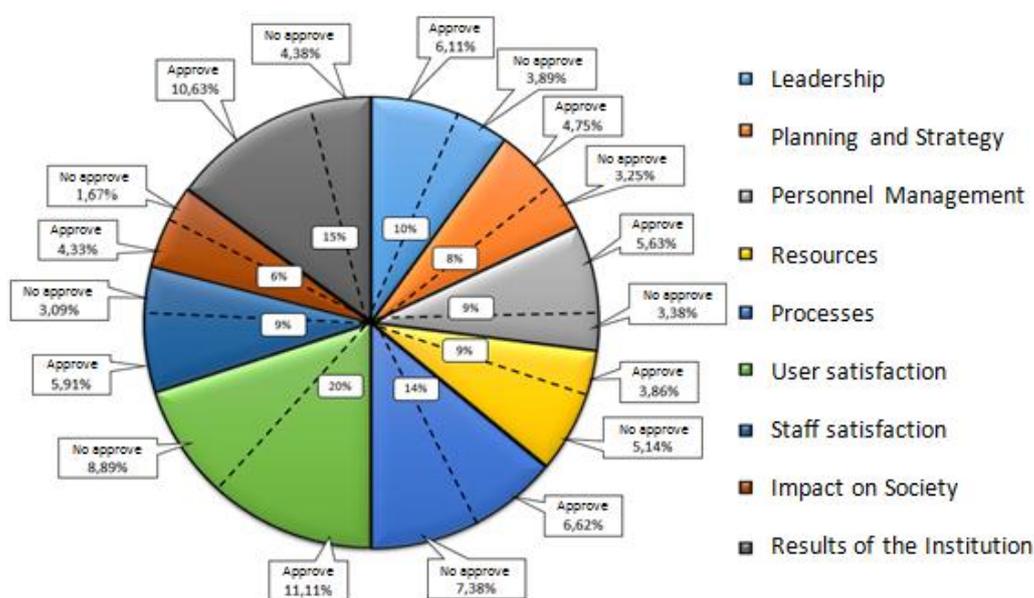


Fig. 1: Compliance with the EFQM Model in the University A



Fig. 2: Profile of the Management Model of University A

Table 2: Results University B: Evaluation criteria in relation to the EFQM model

Criteria	University B (Average Likert Scale)	Percentage given by the EFQM	Percentage that represents in the evaluation the University B	Comment
Leadership	2.33	10.0%	5.83%	Above Average
Planning and Strategy	1.88	8.0%	3.75%	Do not exceed the average
Personnel Management	2.13	9.0%	4.78%	Above Average
Resources	2.00	9.0%	4.50%	Equal to the average
Processes	0.89	14.0%	3.11%	Do not exceed the average
User satisfaction	2.89	20.0%	14.44%	Above Average
Staff satisfaction	2.25	9.0%	5.06%	Above Average
Impact on Society	3.11	6.0%	4.67%	Above Average
Results of the Institution	3.33	15.0%	12.50%	High score
Total compliance:		100.0%	58.65%	

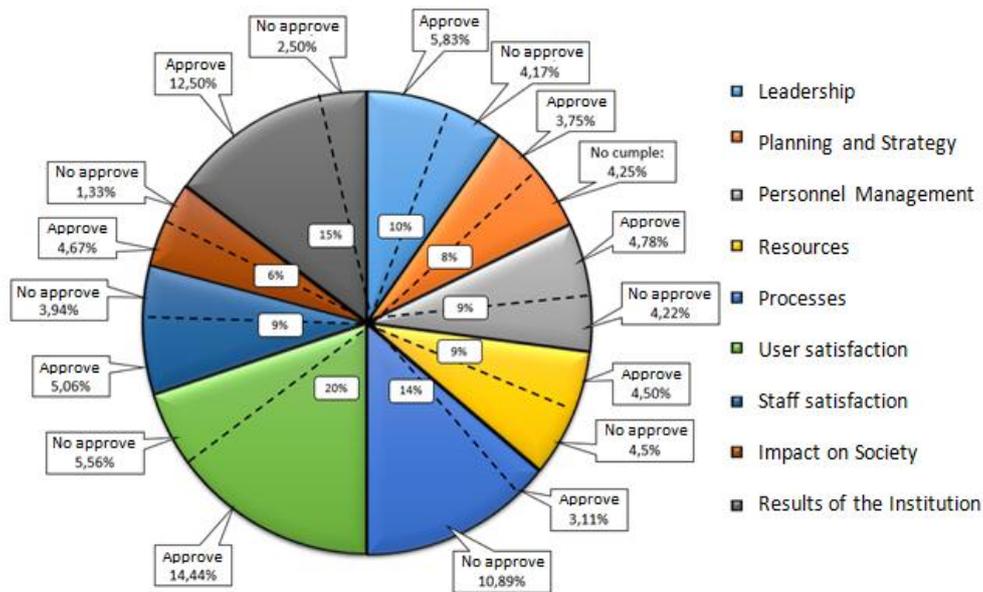


Figure 3: Compliance with the EFQM Model in the University B

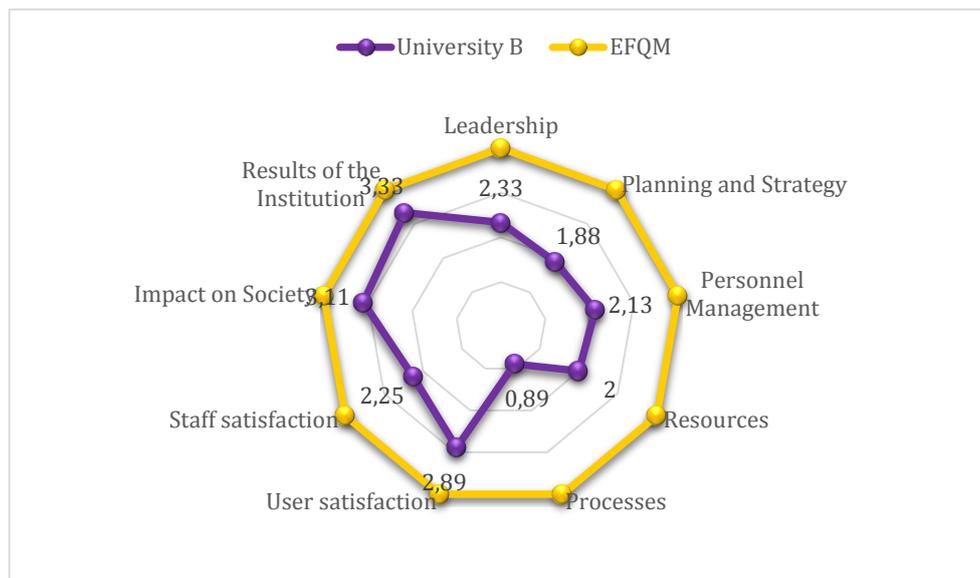


Fig. 4: Profile of the Management Model of University B

In summary, from the diagnosis of the management model made to Universities A and B, and as it is shown in the tables and previous figures, the scope and compliance of the scores obtained show an irregular tendency due to the high incidence in the criterion of satisfaction of the user and the results in the two institutions. In this way, critical areas such as processes and planning-strategy are observed with respect to the reference model, which should be strengthened to achieve greater effectiveness in the organization. This is why it would be pertinent to contribute in the pursuit of continuous improvement through a comprehensive management model that works with all the areas of the institution.

The Public Institutions of Higher Education of zone N° 6 of Ecuador as evidenced in the diagnosis, show their own characterizations regarding: different areas of development, years of experience, organizational structure, academic offer and elements depending on the scope of action. All of the aforementioned show great efforts aimed at the improvement of its management, although experience in the management has been a way of manage to the organizations, it will always be necessary to aim for continuous improvement and frame the management in avant-garde models that promote their strengthening.

In spite of the fact that the researched Universities do not currently operate under a comprehensive management model, they have managed to overcome the average established in several of the criteria of the EFQM model, which denotes their opportune action in the development of their organizations. Hence, the need is centered in the design of a management model that is compatible with the organization, which requires a broad restructuring, so that the different systems that make up each institution are aligned and operate interdependently and systematically.

4 CONCLUSIONS

At present, Higher Education Institutions face great challenges in order to provide society with quality training professionals committed to the service and sustainability of the nation, aspiring international recognition and the contribution of new knowledge and innovative initiatives. Both local and foreign demands, technological progress, cultural, social, economic and political diversity as well as increasing competition mark the need for management under a philosophy of quality.

The technological change, the increasing contextual demands, the advance in the development of knowledge and the constant control by regulatory entities have caused great repercussion and conflict when directing the institutions towards quality, which is why it is necessary to have an integral management model that helps to face such challenges and takes the organization towards continuous improvement.

According to the needs detected in the institutional evaluation of the two universities, the integral management model will tend to improve the area of user satisfaction through the optimization of the processes that impact in the organization in a global level starting from its adaptation to the environment, with a solid base in values and principles that will allow it mark a path of responsibility and fulfillment. Additionally, to contemplate structural elements of the model, raised in development criteria that seek to enhance elements such as: Leadership, Strategy and Plan of Action, the promotion of Human Talent, strategic alliances, optimization of resources, management based on processes and user guidance, results criteria oriented to the users, to the human talent of the organization, results of social impact and integral results that benefit, magnify, and make them stronger in the environment in which they operate.

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