Qualitative Indicators for the evaluation of universities performance

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Abstract

Since the world universities come in to new anxiety in the new generation and higher education in not of its last stability (Clark, 1998), to recognize all issues concerned and also to evaluate the university performance based on the studied and precise conceptual frameworks are of significance. The main purpose of this study is to find the key performance indicators (KPIs) and also to present a conceptual framework for the evaluation of the performance of the universities according to the key performance indicators (KPIs). This study was pilot based on a combination of the research methods (descriptive and deductive) and also survey. Factor analysis and (Kaiser-Meyer-Olkin Measure of Sampling) KMO were used to analyze the data. The inner validity was also measured using SPSS and Alpha Koronbach. In the end, based on the findings, the researcher portraits 151 indicators and 3 conceptual frameworks. 10 factors including accommodation, research and scientific journals, processes, ICT, social and cultural services, faculty members, students, university staff excluding faculty members, and financial affairs. Regarding the universities, 9 and 10 factors were introduced respectively. The Second Framework with 9 Factors Including “Area and ICT, Communications, graduates, Social and cultural services, periodicals and journals, employees, student Affairs financial affairs and processes, faculty members was designed.

Keywords: Key indicators; higher education; performance evaluation.

1. Introduction

Key performance indicators (KPIs) are the most comprehensive objectives in any organizations that direct the managers’ activities to make them attainable. They are so important that in the literature they are considered of significance in quality improvement and objectives attainment.

There is a good deal of studies on the role of key performance indicators that some come as follows. Hubert (1984) postulated that ”Without a general understanding of past events, there will be no permanent change and improvement." Hence, without the evaluation of performance based on key factors and indicators, there will be no permanent change and improvement in the enhancement of the quality of the universities. Since the main function of management is to evaluate the performance to apply and attain the main strategies of the organization, performance evaluation is one of the indispensable needs of universities. The recognition of key performance indicators is one of the principal steps to performance evaluation.

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Fiksel (2002) states that to choose the key indicators, one should at first step consider the needs of the organization and benefit makers. Then, the key indicators and objectives are going to be stabled and recognized. Finally, they should be used in a convenient model of performance evaluation.

Key performance indicators are the guide for decision making for universities. For instance, an attempt has been made to rank the universities by the US Educational council. An attempt in the early 1970s has also been made to design the national indicators to compare the universities, colleges and their programs that include "Ranking of Ph.D program", "Carnegie Classification" and "Gorman Classification of MA and Ph.D programs." Since then, the term "performance indicators" has been introduced in High education in Europe governmental section that was the advent of performance indicator worldwide (Borden et al., 1994).

Answering the question "Are there any suitable quantitative indicators of performance?", Guy and Chris (2005) stated that "Regarding the classification of the potential indicators, it is necessary to offer an introductory framework to investigate the rate and limit of internationalization". The studies carried out by the Department of Education, Science and Technology (2001) revealed that the interest in the performance indicators in high education system has been on the rise in some countries, Australia in particular.

Peiro (2003) introduces two kinds of managerial qualities for managers: "Technical skills" and "General Skills". Sarmad (2004) states that area and the facilities are also significant factors in the evaluation of university performances. Another factor related to universities is curriculum planning that includes organizing a series of teaching and learning activities to create favorite changes in the learners’ behavior and evaluating the rate of attainment of these objectives. (Hsieh, Ling Feng, 2003).

In the investigation of some of the performance indicators in UK high education system, Birch (1977) analyzing the data of Lough Borough university showed that KPIs play a very important role in the regular collection of data on education and the models of the use of internal sources of the organization. Concerning the "performance indicators and remote education officials", Shale and Comes (1998) concluded that "High education systems around the globe are under the careful supervision of people and government and remote education has been of great concern."


There are also other researches on the KPIs in universities. For example, applying KPI in strategic decision making, Dolence (1994) suggests a 9-step method to define and follow KPI in light of Strategic design process style and describes its application and results in Benedictine university. In an attempt to interpret the KPIs, Collin (1990) also states that the current economic and political situation indicates that the current policies in high education are formed based on limited data that consequently lead to unsuitable decisions. Therefore, in order to make sound decisions, one requires other KPIs and variables. Thus, data is a very important factor in evaluating the performance of the universities.

2. Research Method

The research method is correlation. After reviewing the related literature, KPIs and the variables regarding the universities have been found. A researcher-made questionnaire was used to collect the data. SPSS software was used to calculate the internal validity and alpha coefficient %938 was measured. The research subjects are all managers of Islamic Azad universities of the region (78 managers) and some of the faculty members (242). KMO test and factorial analysis were used to analyze the data.

3. Research Findings

The first research question was: "What are the suitable KPIs for evaluating the performance of the Islamic Azad universities of the region?" According to the related literature, the factors were found and were subject to voting among the sample. After collecting and analyzing the data using statistical tests, 10 factors with 53 variables were
validated for evaluating the universities. It was done in a way that the data were calculated using Rotated Component Matrix and 10 out of 15 factors were recognized and confirmed.

Regarding the second question: "What conceptual framework can be proposed for evaluating the performance of the Islamic Azad universities of the region?", a conceptual framework was produced. A second framework with 9 factors including the "Area and facilities, ICT, communication, graduates, social and cultural services, journal publication, non-faculty member employees, financial affairs, faculty members" was also designed.

4. Discussion

Regarding the first factor "Area and Facilities" validated with %795 correlation coefficient, as Sarmad (2004) states is one of the factors influencing the students' satisfaction. The area is of different types: cultural area, research area, lab area, office area, education area, sport area.

Concerning the second factor "Research and scientific journals" validated with %826, the related literature of some countries worldwide such as Netherlands (Early 1980s), England (1979), Australia (1986), France and the USA (since 1910) and Germany (since 1976) have been considered such as "holding scientific lectures, holding conferences, faculty members' attending the conferences, faculty members' publications, expanding the library sources and the access to data banks."

The third factor "Processes" validated with %879 was also the focus of some researches. Busin (2003), for instance, accentuated how to improve the processes for the managers using KPIs.

The forth factor "education and technology" validated at %717 correlation coefficient was in accord with some research findings such as Birch (1977), Snow (1990) and Feng (2003). The fifth factor "cultural and social services" validated at %885 was in concurrence with the findings of some others, Vandan (2002) for instance who believes that KPIs are helpful measurements for the evaluation of performance and planning for the development of cultural and social services.

The sixth factor "faculty members" and the eighth "employees" are accentuated by Draker (2000) who asserted that the most valuable capital of any organization is the scientific employees and their productivity that is a very important factor for evaluation of performance. The report of project management institute (2004) and the research carried out by Samadzade (2005) likewise are in accord with this assertion.

The seventh and the ninth factors "students and graduates" respectively are in concurrence with the studies of Hallahan & Cofman (1989) and Hilder (1990). The tenth factor "financial affairs" is also a very significant factor in evaluation of performance of universities as stated by Robinson (2005) and James (2005).

5. Limitations

This research as any other researches faces with some limitations such as the shortage of high education experts and impracticality of regular schemes of management in university area. The findings of this study, however, propose an up to date approach in the evaluation of the performance of the universities.

6. Conclusion and Implementations

As Clark (1998) stated, the universities worldwide have been entering a period of limitless chaos that has been on the rise in the last three years. Thus, the high education has lost its stability. So knowing the university problems and evaluating of their performance according to the proposed conceptual framework are of significance. The new economic social and cultural planning of the country has made universities a leading figure in this way.
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