

Possibility of Operating the BSC in Universities and Higher-Educational Organizations

Abdulhamid Khosravi^{*1}, Hosein Hamidy², Adel Jahanbani³

¹Department of Economics, Payame Noor University, Faculty Member, Tehran, Iran

²Department of Accounting, Islamic Azad University, Bandar Abbas Branch, Bandar Abbas, Iran

³Department of Computer Engineering, Islamic Azad University, Lamerd Branch, Lamerd, Iran

ABSTRACT

Evaluation of operations is a prime duty of any organization and is also one of the aspects of operation management which can be a voucher of progress, development and organization's goal performance. Of the most complete and thorough method of operation evaluations is the method of BSC which takes all the section of organization under the control and compares them to its aims. The new condition of higher-education proffer and requirements obliges an evaluation in this section. This appeal aims at studying the capabilities and possibilities of performing balanced scorecards in higher education's section. This study, based on its aim, has been a practical research and based on the method as descriptive-analytical. In research method, after stating the introduction, literature, theories and models, the statistical samples of 70 of the managers of center and high-educational organization sections were considered which encompasses dimensions of BSC which are fiscal, customer, learning and growth as well as internal processing respectively, and were distributed after making sure of its justifiability and perpetuity of statistical samples.

The results have shown that there exist the vital readiness for index making BS in the high-educational organization from the view point of fiscal, customer as well as internal processing, however, from the view point of growth and learning, the vital readiness has not yet been basely created in which there is a need for investing and scheduling.

KEYWORDS: BSC, operation management, higher education

INTRODUCTION

With increase in competition in production and service era and in the conditions which organizations are not sure of their fulfillment and success in their strategies, managers are pursuing some tools which aid them in reaching their necessary achievements. BSC as a thorough method, in addition to the monetary indexes, considers the indexes related to the prospective functional incentives. From the possibility point of view, performance in higher-educational organizations section, seems vital due to its efficacious role. However, in Universities some studies have been done in checking the operations and functions, but their performance are not much seen to be done through BSC. In general, the aim of this study is to know which through BSC as a most comprehensive method in management operation, applying this tool in high educations, causes universities to look the evaluations differently. Management operations process, through indicating the goals, standards and capabilities commences, though, for its improvement, it should be started from recognition of the current operations. In fact, evaluation of operation can be defined as a quantity of efficacy and influence of an activity. Traditional methods in operation evaluation which are mostly based on monetary scales, not only are not influential in reflecting the successes or failures of the organizations, but also don't establish the rational reasons, hence, they are unable in managing the programs especially guideline ones.

The weak-points of traditional measurement and competition, requires re-designation of operating measuring systems. BSC is one of the practical devices in strategic programs. Nowadays working units are doing business in an environment which fluctuates constantly due to rapid shunt in technology, economy, work force as well as customer's anticipation. Universities include in such swinging peripherals which most of its activities and services are done through human work force and departments which each one delivers a various service. It is axiomatic that merely utilizing these criteria and assessment cannot evaluate one organization properly. BSC is a method to create the balance between activities and strategies of organizations which in this paper, the possibility of its performance in high-educational organizations of Iran is surveyed.

REVIEW OF LITERATURE

In spite of increase in regarding to human force management, little has been done in BSC possibility field in governmental and private organizations. Mehrgan and DehqanNiri (2009) in their research, with considering BSC

***Corresponding Author:** Abdulhamid Khosravi, Department of Economics, Payame Noor University, Faculty Member, Tehran, Iran, Abdulhamid_khosravi@yahoo.com

strongpoints, tried to develop it for universities environmental analysis. This BSC model has been used in Iran university sections and in some cases, in Tehran management colleges.

Teimori and et al, in a research titled case BSC application, concluded that performing the operational management of BSC system can be influential on unit’s performance.

Hypothesis and appealing model:

Main hypothesis: there is the possibility of BSC performance in Iran’s higher educational organizations and universities.

Subordinate hypothesis:

1. index making possibility from the monetary view point for BSC
2. index making possibility from the customer view point for BSC
3. index making possibility from internal processing view point for BSC
4. index making possibility from learning and growth view point for BSC

Concept	Dimension	Indicator	Index
BSC	Monetary function	Increased efficacy	Increase in income Decrease in expenses
		Financial programs	Student absorption-faculty members and employee absorption-more service to students-evaluation of monetary functions-financial quality of university
		Facilities	Creating peripherals and equipment
	Customer	Customer satisfaction	Student security and satisfaction-flexibility in services-commitments keeping-complains number-awareness of other universitiess services-honesty in employee s behaviors -value of students services-contact with university responsible -attention to the free will of students-decline in bureaucracies
		Popularity and validity	Pioneering in education quality
		Preservation and loyally	Catching student trust-easy accessibility to services-using modern technology operation evaluation from students view point-intimate relationship with students-paying attention to suggestions
	Learning and growth	Employees	Educating employees-specialty and capability in responsibility-assuring the job security
		Information circuiting	Employees information for students- responsible s awareness from university strategies
		Operation evaluation	Number of student admission-ratio of faculty members with student payment and bonus according to the function - employees function programing-promotion-existence of written strategy holding meeting-existence of proper operation evaluation from learning and growth view point-absorption of human force according to applicability and by laws-relationship between employees
	Internal processing	Servicing and supporting	Success in meeting the educational needs-curriculum for obviating the defects of units-designation of supporting centers for servicing to students for faculty members as well-existence of operation evaluation –practical programs for achieving organizational aims-constant reviewing of operations-strategy related evaluation in all organizational stages for detecting weak and strong points-assuring organizational aims with university strategies

METHODOLOGY

The method of this paper is based on purpose, practical research and based on the method, a descriptive-analytical one. After stating the literature, hypothesis, models, the managers of high-educational organizations and universities are considered as the data society. Once statistical samples’ perpetuity and justifiability are assured, they have undergone analysis through SPSS software. For such, mean, average, diagram, statistical table, percentage and independent singular sample T test, variance and Pierson co-efficient are used.

FINDINGS

According to the findings based on the main appealing hypothesis, the possibility of BSC in Iran’s universities (table 1), depicts that the test statistical average (2,145) is more than 1,66, hence, it can be concluded that test in level 5 percent, is significant, thus, the central hypothesis of the research is confirmed as well as there is the true possibility for BSC utilizing in Iran’s universities.

Table 1 : The results of t test Main hypothesis

result	Critical point	Degree of freedom (df)	statistic (t)	Average different ($\bar{x} - 3$)	Average (\bar{x})	Number (n)
H_0 unaccepted	$t > t_{0.05,69} = 1,66$	69	2/145	.15	3.15	70

The findings related to the first subordinate hypothesis, index making from the monetary viewpoint for BSC represents that test statistic (3.117) is more than 1.66 hence, it can be concluded that level 5 test is significant. Thus, the first hypothesis fulfills and there exists index making possibility for BSC from monetary viewpoint.

Table 2 :The results of t test of first subordinate hypothesis

result	Critical point	Degree of freedom (df)	statistic (t)	Average different ($\bar{x} - 3$)	Average (\bar{x})	Number (n)
unaccepted H_0	$t > t_{0.05, 69} = 1,66$	69	3/117	./26	3.26	70

The results relating to the second subordinate hypothesis, index making possibility from the monetary viewpoint for BSC represents that the sum of the test statistic (5.386) is more than 1.66. hence, it can be concluded that test in level 5 is significant, thus, the second hypothesis fulfills and index making from the customer viewpoint for BSC is possible.

Table 3 : The results of t test of two subordinate hypothesis

result	Critical point	Degree of freedom (df)	statistic (t)	Average different ($\bar{x} - 3$)	Average (\bar{x})	Number (n)
unaccepted H_0	$t > t_{0.05, 69} = 1,66$	69	5.386	./39	3.39	70

The results relating to the third hypothesis, index making possibility from the internal processing viewpoint for BSC represents that the sum of the test statistic (2.507) is more than 1.66. hence, it can be concluded that test in level 5 is significant. Thus, the third hypothesis fulfills and index making from the internal processing for BSC is possible.

Table 4 : The results of t test of tree subordinate hypothesis

result	Critical point	Degree of freedom (df)	statistic (t)	Average different ($\bar{x} - 3$)	Average (\bar{x})	Number (n)
unaccepted H_0	$t > t_{0.05, 69} = 1,66$	69	2.507	./19	3.19	70

The results for fourth hypothesis, index making possibility from the learning and growth viewpoint for BSC represents that the sum of the test statistic (-2.254) is less than 1.66, hence, it can be concluded that the test in level 5 is not significant thus the fourth hypothesis is not confirmed and index making from the learning and growth viewpoint for BSC is not possible.

Table 5 : The results of t test of four subordinate hypothesis

result	Critical point	Degree of freedom (df)	statistic (t)	Average different ($\bar{x} - 3$)	Average (\bar{x})	Number (n)
accepted H_0	$t > t_{0.05, 69} = 1,66$	69	-2.254	-./19	2.81	70

Regarding the ranking the four dimensional, average, variance and variant co-efficient table 6 is used.

Table 6 :Mean, standard deviation and coefficient of variation of the four dimensions

Variant co- efficient	Variant	Average	Dimensions
21.17	./69	3.26	Financial performance
17.99	./61	3.39	costumer
20.06	./64	3.19	Internal processing
24.56	./69	2.81	Learning and growth

Regarding the sums achieved for variant co-efficient, table 7 is used.

Table 7 : Ranking four dimensional based on variant co-efficient

Variant co- efficient	variance	average
17.99	customer	first
20.06	Internal processing	second
21.17	Financial performance	third
24.56	Learning and growth	fourth

The results have shown that the dimension of customer is more superior for performance for evaluation of BSC, then, internal processing, monetary and learning-growth, respectively.

Conclusion

Evaluation of possibility of performing BSC from four dimensions of customer, internal processing, learning-growth and monetary represents that universities and higher-educational organizations from the viewpoint of efficacy in performance, monetary programming and facilities have acted propitiously and there exist the possibility of performing the BSC from the viewpoint of finance. In addition, from the viewpoint of customer's satisfaction, popularity, credit and loyalty, it is represented that there exist the possibility of BSC performance from the customer viewpoint. Checking the indicators of development and delivering new services and backup support, innovation and fulfillment of the educational needs proves that there exists the possibility of index making from the internal processing viewpoint in universities. Besides, possibility of index making from the learning-growth viewpoint depicts the fact that universities are not successful in educating its employees, specialty and capability of its forces in performing the responsibilities, guaranteeing job security, offering proper educations complying with workers' expertise, information circuiting, managers' awareness from university strategies, ration of faculty members to students, operation evaluation of workers, promotion, written strategies in universities, holding meeting regarding university strategies and work force absorption based on the bylaws and their capabilities. Thereby, there doesn't exist the possibility of index making from the learning and growth viewpoint for BSC in universities. This is the indicator of the fact that universities have not provided proper facilities, provisions and investments in this field.

For obviating the weak points and strengthening the strong points so as to perform BSC in educational section in Iran, the following suggestions are stated:

- researching the same appealing in other universities of the world
- translation of articles and reference books in the field of BSC through the related experts
- assembling the written strategies in higher educational organizations and holding meeting and workshops for enacting strategies and obliging the employees to access them
- regarding to the constant increase in absorption of students in the world, Iran ought to purvey all qualities towards the customers' satisfaction and absorption
- in time reviewing of operation evaluation, customer, internal and learn-growth processes.
- creating operation evaluation systems all-out in organizations and universities
- considering the present problems in learning-growth aspect, Iran's universities should provide the needs through scheduling and discipline
- towards the growth and development in efficacy of employees, the specific regards are required to their education such as early working ones and during the process.
- for reaching the organizational aims and employees' satisfactions, the specific regards to the job security and employing is required
- towards customers' satisfactions, universities are to hold educational sessions complying with personnel's responsibilities for information circling and managers' awareness and employees' to the university strategies.
- holding incentive sessions such as stabilizing the employing status and proper in time payments can encourage university personnel to perform the organizational aims better.

REFERENCES

TeimoriEbrahim, Ahmad Zamani, Majid and Ali Soleimani, AlirezaBita, *BSC case studying, Tadbir journal, number 142. www.civilica.com*

HosseinporReze and Hamid Arasteh (2010), checking and selecting BSC basic sample of appealing defending centers, appealing and curriculum periodical in high-education, number 57

MehrganMohammadreza and DehqanNiri Mahmud (2009), Strategic model of evaluation of high-educational organizations, appealing and curriculum periodical in high-education, number 52

Chaung, m(2006), The balanced scorecard: creating a management system for private technical universities in Taiwan, in partial fulfillment of the requirements for the degree of Doctor of Philosophy, university of Spalding, Louisville, KY, USA.

Christesen, D.A. (2008), Impact of Balanced scorecard usage on organization performance in partial fulfillment of the degree of philosophy, university of Minnesota.

Delker sue & Gentry Bevely (2003) "Balanced scorecard: an instrument of change for faculties services" A project presented to the faculty of California state university, san Bernardino.

Kaplan, Robert and Norton David p(1996), Translating strategy into action, balanced scorecard, Harvard business school press.

Neely, Andy,, Gregory & Plants Ken (1995), performance measurement systems design, international journal of operations and production management, vol. 15. No4