



Balance Scorecard systems: designing and implementing (A case study: Shiraz University)

Reza Jamei

Assistant Professor of Accounting, University of
Kurdistan (UOK), Sanandaj, Iran.
r.jamei@uok.ac.ir

ABSTRACT

Different models with various approaches to strategic positioning have been employed to define it in various industries. As one of the powerful models, BSC analyses all aspect of organization evenly.

In this study BSC is used as an instrument to make Shiraz University more efficient in implementing strategic and performance or supporting their strategic plan. Therefore this study aims to design and implement BSC system in Iranian universities in order to improve their efficiency

Keywords:

Iranian universities, Design and implementation, Balance Scorecard system.

1. Introduction

In late 1980s, lots of articles were published in management magazines in America and Europe about the inefficiency of different performance measurement tools at companies (Namazi, 2014). In 1987 researches were made by National Association of Accountants (NAA) and Computer Aided Manufacturing-International (CAM-I) institute in America. The balanced scorecard (BSC) is one of the performance measurement tools that determine intangible assets of the organization. This system is used more frequently in strategic planning than that in performance assessment. Due to the long domination of traditional management approaches in Iranian educational systems, they seldom use a balanced performance measurement tool. Most of them use the financial measures only. This unbalanced system forces the organization not to pay attention to its intangible assets. After giving general descriptions about BSC, this article shows the design and implements balance scorecard system in educational systems.

2. Literature Review

What is a balanced scorecard?

The balanced scorecard (BSC) is a performance measurement tool originated in the business world.

Performance measurement is a method of tracking performance over time to assess if goals are being met.

The BSC was introduced by Robert Kaplan, and David Norton, the founders of balanced scorecard. In the early 1990s as a new way to measure business performance, organizations measured their performance to monitor how they achieve their

overall mission and goals. Traditionally, companies measured their performance by looking only at how they were doing financially, for example measuring only profit increases or cost efficiency. Kaplan and Norton's BSC concepts challenged this traditional, single focused approach to performance measurement (Kaplan and Norton, 2014).

IMPLEMENTATION OF BALANCE SCORECARD SYSTEM IN EDUCATIONAL SYSTEMS

The founders of balanced scorecard-have described this method simply not simplification (Kaplan and Norton, 2014).

Selecting a suitable organizational unit

Criteria for selecting a suitable organizational unit

Some criteria need to be considered for important decision before concluding that a balanced scorecard system is the best option at high level for you, A variety of elements help us to select an appropriate organizational for the first balanced scorecard system. These criteria are shown in Figure 1.

Strategy

The most important criterion is that if the desired unit has a clear and coherent strategy, the method of a balanced system is a special method designed to help you to interpret your strategies to the objectives and measures having the capacity of controlling. Without strategy, it would be like as a set of financial and non financial measures are collected so that they have no connection to each other.

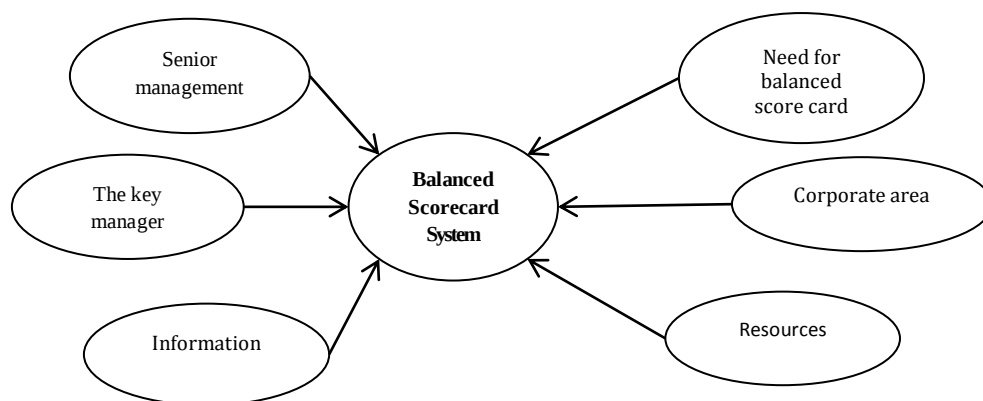


Figure 1 . Seven Criteria for selecting an organizational unit to implement a balance scorecard system.

Need of a balanced system

Answer to this question is needed in order for the desired unit to have a specified objective for implementing the balanced system.

The possibility of providing information

This criterion refers to two subjects. First, does a desired unit have a culture of performance assessment?

Although any group in a modern organization should rely on the measures and performance criteria, the assessment of this issue is relatively difficult. It is because some of the measures of a balance system are probably new and their required data resources are probably undefined. However if the desired unit has some problems in collecting the data related to the current performance measures, it will certainly have some problems in providing the data related to the balanced scorecard system.

Resources

To implement, a unit should be selected to have the possibility of providing information. For this reason and considering this point that if the performance appraisal of a university is done through the method of effectiveness, the university may use the internal strength points to make benefit from the internal opportunities, identify the threats, defend them and finally before becoming harmful of internal weakness point, decrease its power. Because of the defects in the present methods of performance appraisal, the performance may not be evaluated accurately, so the managers will not be able to make decision accurately with respect to the evaluation. In order to remove this problem, the balanced scorecard system allows a university to interpret and evaluate the strategies and views based on a special pattern.

Regarding the available resources and adequate information and precise strategies (second stage of implementation) and the requirement to the method of balanced evaluation mentioned earlier and the great share of university and academies (including the students, professor and staff) a suitable balanced scorecard approach was identified.

General evaluation of Table 1:

This unit has attained a very high score (8.8 from 10) and therefore it is a good candidate for implementing the method of balanced scorecard.

Collecting required background information to determine the strategies, views and mission s of an organization

Balance scorecard system is a tool for describing the strategy. To achieve this hypothesis, it is necessary to access the necessary data and information in the realm of mission, perspectives, strategy, competitive condition and the core capacities of the organization staff (Bakhtiari, 2014).

Directing a course of interview for making clear the perspective and mission statement and finally the achievement of strategic goals

With respect to the studies and group sessions of the university, perspectives, missions and goals are as follows:

1. Creating a dynamic and creative learning environment for the teachers and researchers.
2. Providing permanent financial resources.
3. Preparing update software and hardware equipments.
4. Achieving, maintaining, and developing research situation for increasing scientific productions at national, regional, and international levels.
5. Improving and developing the quality of services for the students.
6. Continuous improvement of scientific and administrative management.

Integrating the results of interviews and determining the strategic objectives and goals

After clarifying universities' strategies and goals, any of these goals should be assigned to four perspectives of the balanced scorecard system. Balanced scorecard is changed to a framework for implementing and strategic managing at all levels of organization and it does this work by linking to the ultimate goals, innovations and standards related to the overall strategy and provides this by maintaining financial measures with the other key indicators around customer perspectives, internal business processes, organizational growth, learning and innovation and offers a view of organizational performance to the company (Bakhtiari, 2014). So, the goal has dedicated to four perspectives in Figure 2.

Assigned objectives to each four perspectives of the balanced scorecard system

Balanced scorecard system completes financial indicators from the past performance with the future performance. The goals and indicators of balance

scorecard system have been determined through strategy and perspectives of organization. This goals and indicators refer to the performance of organization in four aspects: Finance, customer, internal processes, learning and growth (Figure 3). It also provides a framework for balance assessment system. In fact, in this stage, the strategy is converted to the goals (Kaplan and Norton, 2004).

Financial perspective

1. Financial perspective is vital for organizations, because it will obligate us to identify and set financial goals that an organization need to achieve them.
2. Financial perspective mentioned some cases which are very important.
3. The main objective of business is to create wealth creation that is determined by achieving the goals.
4. The purpose of the quantitative-financial goals is to prepare the operational units for performance management and to achieve the competencies for future success.
5. Financial perspective is a related performance index because it registers the success after its occurrence.

Therefore, we may explain the goals of an organization as follows:

1. Reducing the cost of manpower.
2. The increased use of assets (Kaplan and Norton, 2014).
3. Developing the income opportunities (Kaplan and Norton, 2014).
4. Improving the cost structure.
5. Growing the income from investments (Administration proceedings, 2009).

Customer perspective

Who are our target customers and what we offer them through evaluating the service? Customer's perspective goals and purposes describe the strategic goal and the presentable value of an organization. Some of the goals considered by the organizations are as the follows:

1. Effective and accountable operations.
2. Offering competitive prices.
3. Attracting, developing and retaining the best customers.
4. Increasing customer satisfaction.
5. Improving the perceived view of the university.
6. Delivering the innovations that make business and career value.

Clients of educational organizations are employees, students, parents, government and labor market (Bakhtiari, 2014). In general, teachers of educational organizations, managers, and learners are internal clients, but governments, public sector, and parents are foreign clients. If both internal and external customers are satisfied with the performance of educational organizations, University will not lose their learners and will sustain a client perspective.

Internal processes perspective

In order to determine the strategic goals what should the internal processes perspectives of organization do? One of the various benefits resulted from using the balanced scorecard, is identified as the results of actions in this perspective. Most performance systems in current processes are focused on gradual improvements, while the balanced scorecard method may lead to the formation of entirely new processes for realizing the desired values of the clients.

The internal processes may generally be classified in four groups:

1. Operational (a key goal in this strategy is a low end-cost): It produces the product and service and supply them, such as production, supply, providing the opportunities for students and preparing educational and research facilities.
2. Customer management (a key goal in customer-oriented strategy): It enhances the customer's value, such as selecting students, employing, retaining and developing the instruction corresponding with them so that they are related to the ultimate quality assurance.
3. Innovation (a key goal of output leadership strategy): A process that will create new products and services such as: Identifying opportunity, research and development of projects, designing / developing and implementing.
4. Legal and social: Emphasis on effectiveness of the management, improvements in education quality, management process, real-time appraisal and services to increase effectiveness and reduce the time proposed to attract satisfaction (Neon, 2002).

Learning and growth perspective

Learning and growth perspective is the basic in the balanced scorecard system (Kaplan and Norton, 2004). This perspective may be regarded as a driving force for the three previous approaches in achieving high performance. The function of this perspective is

to create a complete set of core technical capabilities and to improve the previous three perspectives. Upon rapid advances in information technology, competition in educational market has increased as widespread (Chen et al., 2012). Intangible assets in educational organizations, including universities, are classified in three groups:

1. Institutional capital
2. Investment information
3. Human capital

Some conceivable goals in this perspective are:

1. Developing the diverse and effective workforce
2. Promoting and developing the spirit of partnership
3. Appropriate access to information and an attractive and healthy working environment.

Universities should provide opportunities for members to learn and grow. Human capitals at the Universities are professors, researchers and staff.

Using the balanced scorecard in the performance evaluation system will result in improving the assessment, saving cost and time. The use of verbs such as increase or decrease, start, create, reduce, improve, becoming and the other verbs like these may be the facilitator when setting goals. Specified goals should create necessary motivation for performing the desired actions in people. But these goals should not necessary be quantitative in their nature.

Performance measures form the basic core of the balanced scorecard. For selecting measures is to remain in combination of performance evaluation system which may be examined through some of these criteria. Collecting necessary data to calculate the measures is also one of the important aspects and challenges in the establishment of a balanced assessment system.

Some criteria for selecting performance measures

Designing and implementing the balanced scorecard as an organization management system orientation, requires the selection of goals, quantitative goals and executive initiatives to achieve them. Difficult decision making process appears at the stage of measures selection.

These measures are as a main core in the balanced assessment system and it's considered as a reference and a focus point for all organizations.

Relationship with strategy

Relationship with strategy is considered as the most obvious and significant criterion to assess the measures but its importance is not necessary to be emphasized significantly. In many businesses, a balanced appraisal system includes number of measures play an important role in daily performance. But it does not seem to be directly associated to the strategy.

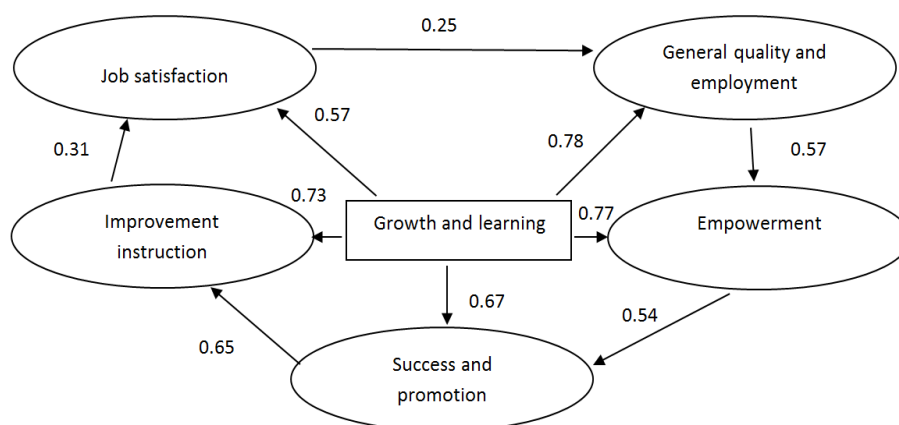


Figure 2. Structure constructional equations, growth and learning in Iran's University.
Using indicator to achieve the success criteria for any goal

3. Result

Being quantitative

Usually people involving in designing a balanced appraisal system, tend to evaluate subjective performance measures such as giving score to the functions of providers with titles such as "good" or "intermediate". The problem facing this way is that if 10 people give score to a provider, completely different results and responses may be found. Now, if the same providers are evaluated according to the percentage of deliveries performed on time, the obtained results will be objective and the same meaning carried to all those involved in the issue. All

people have the same concept of 10% but the conception of "average" might be very different. With a little creativity, all of performance measures may be calculated mathematically. As shown in Table 2

Preparing an executive program for collecting the required data

Due to the quantity target refers to the units of university which associated with the target. For the three financial perspective and customer and internal processes will suffice to the working documents and reports from university.

Table 1. Worksheet of university's selection to implement a balance scorecard system.

Selection criteria	Rating unit	Weight (%)	Total score	Justification reasons
Existence of clear strategy	10	40	4	Universities generally have a clear strategy
Senior management support	10	45	4.5	With the establishment of a management meetings university issued a work order
Need for balanced system	8	15	1.2	According to lake of suitable system for performing evaluation, It is felt the need to maintain and expand the unit and status in the future
The key managers support	15	10	1.5	A little work might be done due to the business.
Corporate area	18	5	0.9	The activities of unit are determined clearly.
Possible to obtain information	18	5	0.9	It is possible to provide information easily according to the clear objectives, strategies and customer of the university
Resources	8	5	0.4	The department is facing shortage of manpower So, it is in trouble for providing manpower for the project

STRUCTURE CONSTRUCTIONAL EQUATIONS, GROWTH AND LEARNING IN IRAN'S UNIVERSITY

The results of structural equations analysis is reflected in Figure 3. As seen, growth and learning are as dependent structures. As shown in Figure 3, empowerment has the most influence on the structure of growth and learning so that it has the highest correlation coefficient. Job satisfaction has the least influence on the structure of growth and learning.

4. Conclusions

Customer-oriented criteria are very important. In other words, this equation needs to be answered that what activities should be done by the university internally in order to meet the students' needs and expectations? One of the important obtained results about implementing the balanced scorecard system is

the index classification. In other words, for any of four perspectives related to the balanced scorecard system (financial, customer, internal process, and growth and learning), firstly the quantitative goals need to be assigned accurately to allow a precise appraisal of reality with the available standards at any stage of implementation.

The fundamental principle in implementing the balanced scorecard system is that the criteria of performance evaluation be related to the Shiraz university strategy.

In reaching to the important and essential conclusion in implementing the balanced scorecard system in the universities of Iran, this point should be stated that the perspective of growth and learning is an important and fundamental view in implementing the balanced scorecard system in the university. Selecting suitable quantitative goals and achieving these goals also allow implementing the other perspectives the important results are shown in Figure 3.

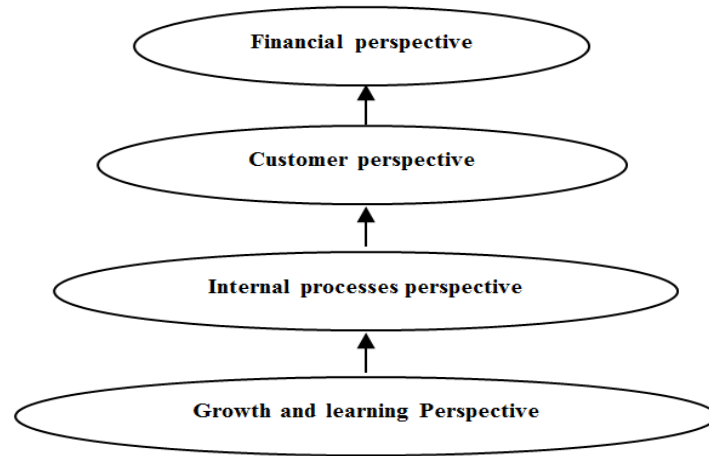


Figure 3. Ranking the perspective of the balanced scorecard system.

Table 2. Quantitative indicators.

Perspective	Subject	Quantity targets	Disposal units	Performance indicators
Financial	Appropriate financial structure	Increasing income increasing the rate of assets Reducing human resources costs	Tuition revenue Business gifts Rates of use of library facilities and resources Rate of human resources costs Redeemed or retired inappropriate employees	Accounting unit Promotions agency Educational unit General unit Library Public relations
Customer	Accordance with customer expectations	Increasing customer satisfaction Image of university progressive	Customer satisfaction The number of customer complaints Rate of dissatisfaction with the institution	Secretariat Educational unit General unit Public relations
Internal process	Internal process	Implementation process with appropriate quality Appropriate training facilities Providing education with best quality	Rate of educational facilities up-to-date Rates of educational facilities Rates library Specialist teachers	Secretariat Public sector Educational unit Research division Information center

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