

Investigating the Impact of Strategic Planning on Targeting Production-oriented Organizations Using BSC

Dr. Jayabrabu Ramakrishnan^{1*}, Dr. Dinesh Mavaluru², Dr. Azath Mubarakali³

¹College of Computer Science and Information Technology Jazan University, Saudi

²College of Computing and Informatics, Saudi Electronic University, Saudi Arabia d.mavaluru@seu.edu.sa

³College of Computer Science Department of CNE, King Khalid University, Saudi Arabia mailmeazath@gmail.com

ARTICLE INFO

Article history:

Received 05 Jun 2019

Received in revised form 23 Aug 2019

Accepted 26 Sept 2019

Keywords:

Balanced Scorecard,

Development and Learning,

Production-oriented Organizations,

Targeting

ABSTRACT

Targeting in organizations is one of the main pillars of determining organizational fate. The extent of transparency of objectives has a great impact on the design and formulation of main key words of strategic planning. Regarding the attractiveness of the BSC method and its application in production-oriented organizations, it can increasingly achieve the macro goals, if it is focused on BSC components which are the four perspectives of finance, customer, internal processes, and development and learning, it becomes more dominant in the design of key organizational factors. Many of the techniques used in organizations have achieved acceptable results that have been very effective. Including these approaches and techniques, it can refer to the comprehensive management, customer-oriented and customer attraction based on BSC components to achieve excellent goals on thought and planning of manager of a product-oriented organization. A balanced scorecard can be considered a common goal among managers that are based on common goals based on BSC principles and corporate financial approaches and the process of attracting customer and attracting capital.

1. Introduction

Investigating and evaluating the performance of BSC and utilizing its results to improve the performance of organizations and companies are an important issue in their success. Many organizations in implementing Balanced Scorecard Model have emphasized that have achieved good and acceptable operational processes for achieving managerial goals in organizations and companies using four scorecard evaluation model (BSC). Formulating strategic and operational plans will be a complex and difficult process, but their successful implementation is far more difficult and hard. Full implementation of strategies fails because there is no strong structure for aligning employees and operational processes with the goals of the organization (Krielman, Machijani 2008). BSC's performance evaluation system has characteristics such as observing objective and criterion, evaluation indicator, the ability to measure evaluation indicators, achievement of the organization's goals at a given time, the outcome of the evaluation system, and adequate time allocation for evaluation. According to the efficiency of the BSC model and its pervasive use as a performance evaluation system, one of the issues raised in this model is that its initial design is for trade businesses and applying it in realization organizations helps to the evolution and match of this model with the characteristics of R&D organizations. Performance evaluation issues can be examined from different angles (Afkhani Ardakani, Mehdi 2016). There are two basic traditional and modern views on this issue. According to the limitations of the traditional performance evaluation method, which based on financial measures, not only were not sufficient in full reflection of the reasons for the success or failure of companies, but also there was not the rational and causal relation between success factors and achievements, so they were unable in supporting the management plans, especially the strategic plans of the organization. This view is solely focused on the performance of the past period and has been shaped by past requirements. New view, training, growth and development of evaluative capacities, improvement of individuals and organizations and its performance form the weaknesses and strengths of the organization. The origin of this view is contemporary requirement and develops into systematic evaluation of performance using modern techniques and methods. In the ranking of the four dimensions of the BSC model, the financial criterion was placed in the first priority and the criteria of internal processes was placed in the last priority. In the ranking of financial dimension indices, the income to cost index was placed in the first priority and the liquidity condition index to finance current spending was placed in the last priority. In the ranking of indices of internal processes, the total number of successful projects/total number of projects were in the first priority and the volume of outsourcing projects within the organization/total volume of

*Corresponding author: Arabia.jayabrabu@gmail.com

DOI: <https://doi.org/10.24200/jmas.vol7iss04pp61-67>

outsourcing projects were placed in last. In the ranking of the indicators of customer satisfaction, customer satisfaction index was placed in the first priority and the index of presence in the industry was placed in the last priority (Afkhani Ardakani, Mehdi 2016).

2. Research method

The present study, developed in the form of a descriptive and library design, is based on how to improve performance in production-oriented organizations. Attracting customer in production-oriented organizations based on BSC Card and CRM Method can help to the way of dealing with the customer, responding correctly to problems regarding service delivery and respond to customers.

2.1. The process of creating and applying the BSC method

1. Performing the strategic planning steps of the organization to achieve the annual goals
2. Identifying important processes and functions in the organization
3. Creating goals or standards for identified functions
4. Creating performance indicators
5. Identifying the flow of information and data
6. Collecting data to calculate the actual value of the indicators
7. Analyzing actual performance report
8. Identifying problems and make decision about reforming performances, changing goals and indicators
9. Performing corrective measures (Barfrooshan, Sohrab 2011)

2.2. Balanced Scorecard

Jack Welch's recommendations about the performance evaluation system emphasize that today performance evaluations of employees have lost their efficiency once or twice a year. Performance evaluation systems must be acted by separating employees. So that people know their rank in the organization. The performance evaluation system and its results are no longer a confidential matter for segmentation of employees and settlement. The BSC scorecard can be used for removing these parameters. In this regard, many managers have noticed that their performance measurement systems don't act properly because they do not either identify their performance indicators or, if they have identified them, they have not identified them properly and correctly.

Developing key indicators of correct performance is one of the issues that most organizations face with it. A practical approach that has attempted missing loop of BSC by introducing two twelve-step models; one for implementing a balanced scorecard in the organization and the other introducing the David Parmenter model to identify or modify performance measures and reporting methods and preparing worksheets for each step to evaluate and determine the performance indicators of their organization (Rezaei Ghahram, Mohammad Reza, Aghaseyed Hosseini, Reza). Balanced Scorecard is a new management concept that helps all managers at all levels to monitor and control their activities. (Robert Kaplan, David Norton). BSC can be considered as a solution to achieve the goals of manufacturing organizations and companies using components such as reliable workforce, committed staff, senior management, and management of managers of other parts of the organization. BSC can be regarded as the right management tool in many companies and institutions. Gaining profits and reducing organization costs using four balanced scorecard perspectives can provide a comprehensive and correct plan to managers to have an adequate control over the entire organization. Any organization manager who can plan new software and components based on some BSC and CRM knowledge-based suggestions and questions for organization retention, survival and profitability and attracting customer has taken an important step towards better realization of organization and customer satisfaction.

2.3. Corporate and organizational goals and strategies

In evaluating the performance of organizations, various models were used such as Balanced Scorecard (BSC) model, Organizational Excellence Leadership Model (EFQM) which could promote quality level as an important element in increasing competitiveness, understanding requirements and excellent executing and sharing information. Deming Prize Model is one of the oldest quality and productivity awards in Japan, the award was created in 1950 according to Mr. Deming's comments and training lectures by the Society of Engineers and Professionals of Japan (Kharazian, Payam 2015). This paper refers to the Balanced Scorecard (BSC) model in evaluating the performance of organizations. The Petroleum Industry Research Institute, as one of the pillars of the Ministry and an innovative organization with advanced equipment and expert human resources, has allocated a proper position among industry-related research centers throughout the country in recent years. Also, in this study, the automotive manufacturing company has been used for evaluating CRM scorecard which has four dimensions (infrastructure, process, customer and organizational performance).

Identifying the factors affecting CRM evaluation, and providing a solution to improve the current status of CRM implementation is the most important output of this study. Non-considering the fundamentals of CRM that should be implemented in the company causes the customers not to have a good experience in the competitive market from relation with company, and this indicates that the cost of attracting new customers is higher than the costs of customer retention due to marketing and advertising costs. (Yunja 2006, citing from Mirab Astana, Peyman, 2010). Organizations that are successful in implementing a cost leadership strategy usually produce standard, specific products and services and often have a relatively large share from market. Since these companies purchase raw materials in a large amount, they pay less for them. Wal-Mart is one of those companies that use cost leadership strategy well. Wal-Mart believes that the production and operation process is highly efficient. The company makes its purchases on a large scale so it can get the

most reasonable prices from suppliers. It can transport goods at minimal cost due to the transportation system. It is worth noting that low price supply causes to obtain a significant profit (Arabi, Mohammad 2016).

2.4. Customer and capital retention in production-oriented organizations

At production-oriented companies, indicators of performance of customer satisfaction is on how to produce goods and services related to customers to remove defects in the goods, and to guarantee and respond to their problems. Increasing correct performance leads to increase customer satisfaction. Between 35 and 75 percent of customer relationship management programs fail. Programs also fail not only economically, but also they damage the organization's relationships with customers. In order to implement CRM in automotive manufacturing companies, specific programs and projects such as launching customer IVR to reduce the volume of in-person visits, website design, customer service department and comprehensive software of investigating complaint in the field of customer relationship have been developed. But in practice what is happening is nothing more than responding the demands of customers in terms of sales and after sales services and handling their complaints (Mirab Astana, Peyman 2010). The scorecard contains several main general indicators and a number of sub-indicators such as customer satisfaction, customer retention, new customer attraction, profitability and market share in the different parts of market and customer that are competing (Heidari, Marzieh 2016). Generally, value creation factors for customers are classified into three groups:

1. Product or service features: Including customer waiting time, price, quality, function, and distinction of product or services
2. The customer's mental image from the organization, its reputation and credibility, which include people's perception of the quality of the product sold and the accuracy of the organization's work.
3. Customer relationships including trusteeship, reliability, and speed of accountability of the organization to customer and after-sales service (Heidari, Marzieh, citing from Kaplan & Norton 1992).

Improvement in customer satisfaction increases work profit as well as facilitates work progress (Dorvilero & Yakhov 2005, cited from Heidari, Marzieh). Richard and Thiel (1996) showed that a 5% increase in customer retention can have a 30-95% impact on a specific present value and a similar impact on corporate profits (Yangui 2004, citing from Mirab Astaneh, Peyman. 89). Many factors influence customer satisfaction. These factors include service quality provided to customers, employee productivity, and organizational knowledge. Most customer complaints also originate from how employees interact with customers (Smith 2006, citing from Panahi, Fatemeh, and Afshar Kazemi, Mohammad Ali 2014). Reducing marketing costs and providing service to customers can dramatically reduce marketing and sales costs for three reasons. First, the cost of acquiring a new customer can be up to five times the cost of retaining a current customer because fewer sales activities are done to maintain the current customer. Second, satisfied customers can be the best source of advertising because of recommendation to family, friends, and neighbors, because customer advertising is far more than the advertising that companies pay for. But if customers are not satisfied because of uncertainty, they have enough reasons to not to buy company's products and transfer this bad experience to several others (Rusta, Ahmad, 1996).

2.5. Exploitation of BSC

A balanced scorecard helps organizations to benefit from three key subjects: measuring effective organizational performance, increasing indirect assets, and challenging the implementation of strategy (Paul, Ray van, pp. 15-15). The BSC card can be investigated to evaluate financial achievements and earnings. The financial measures are important components of the balance evaluation system; ultimately what financial results and achievements will be obtained (Kaplan and Norton 1992, citing from Roya Yaghoubinejad, 2011). Financial indicators have a great importance in many organizations. These organizations try to increase revenue, reduce costs, take risk and use assets effectively and increasing productivity. In fact, achieving the right financial results for financial corporations and institutions to survive and grow is essential. BSC by linking financial criteria to each other provides managers a good image of the economic outcome of their activities. An example of common financial criteria is return on equity, return on operating equity (IranZadeh, Soleiman & Barghi, Amir 2009). Mercedes Benz is one of the most inspiring automotive manufacturing companies in the world, by holding a fashion show and a brand development across the world to develop Fashion Week; it introduces its products and acts to manage the target market. Many companies prepare the program and budget not only for the operational plan but only for providing the annual assembly and do not seek quantitative and temporal coordination. A full budget program should have quantitative goals - described in the strategic plan. Quantitative and temporal proportion is very important and a balance should be between production and sales (Azar Abadegan, Seyed Ali, 2016). Financial criteria have valuation on the commodities, providing appropriate services, receiving profits and reducing losses. Profitability can be increased by the proper management of senior manager and the use of experienced staff. Reducing the cost and attracting the investor and guaranteeing the type of commodities produced in production-oriented companies can be considered one of the ways of proper profitability and finding a suitable and guaranteed market for selling goods. Financial criteria have many weaknesses and limitations, but their existence because a good financial control system can improve a company's Total Quality Management and the relation between improved operational performance and financial success is completely inaccurate and uncertain is required. In the Balanced Scorecard, as an approach to measure performance and a tool for control, financial performance is measured with similar ratios and indicators (Heidari, Marzieh, 2016).

2.6. Marketing strategy

In creating a balanced scorecard, it is necessary to consider the goals and missions of the organization. In a balanced scorecard, indicators of internal processes and financial and non-financial outcomes are interconnected within a network of causes and effects. The Balanced Scorecard, as a powerful tool in strategic analysis, seeks to cover all the key activities of an organization (Ahmadi, Ali 82).

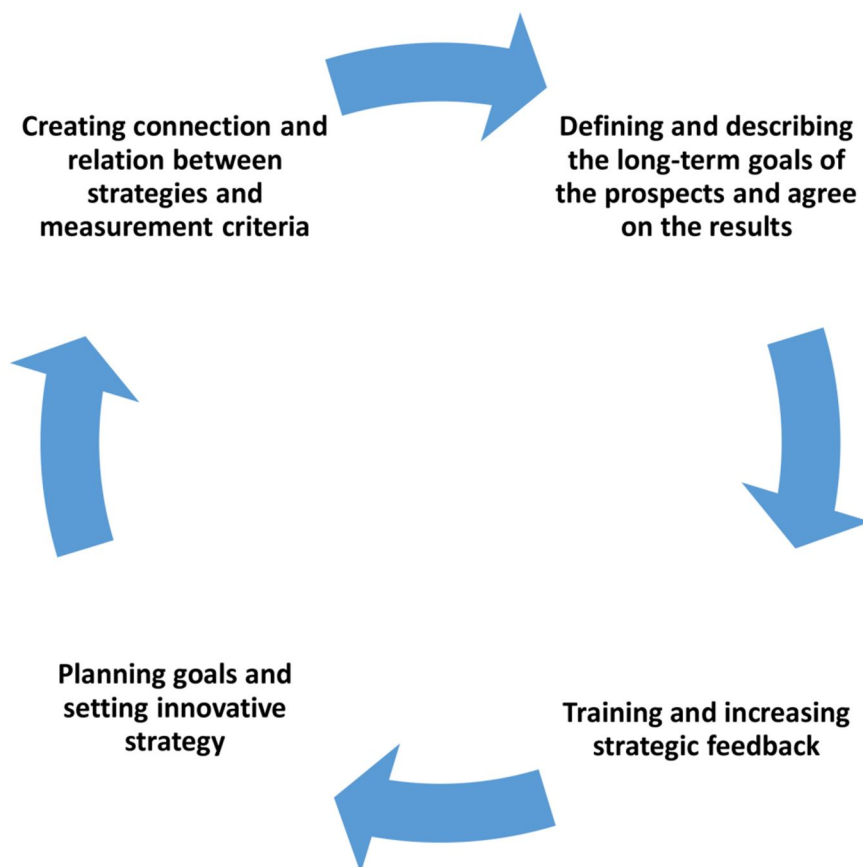


Fig. 1. Executive framework of BSC model

2.7. BSC application

Toyota in Norway, utilizing the BSC method, has been able to win the consumer satisfaction award in Norway for four consecutive years. 75% of companies that are using BSC method or equipping with this software of BSC method or equipping themselves to the software, also Microsoft's company is preparing a Software to mechanize the BSC method in the organization and considering that the policy of Microsoft's company is on producing high-use and comprehensive software worldwide, this represents a widespread application of this method in the future by organizations (Gholami and Noor Alizadeh, 2004, citing from Haddadi, 2013). Bahagovat and Sharma examined the evaluation of management performance of supply chain in small and medium-sized enterprises in India using Balanced Scorecard. They proposed criteria in Balanced Scorecard for evaluating supply chain management performance and a system of evaluating balanced performance for design and analysis of supply chains (Bahagovat and Sharma 2007, citing from Haddadi 2014).

Employees in an organization need functional information. This information should be relevant to their daily activities. With a focus on short-term outcomes, often at the cost of long-term value-creating activities, are they proposed in today's environment? The answer is yes. As we know, the Balanced Scorecard is just this: balanced. Incorrect focusing on any particular area that is often done often leads in poor overall results. In the 1980s, the focus was on improving productivity; in the 1990s, quality in a modern and seemingly critical became success of the organization. According to the principle of measurement, many businesses can be considered a significant improvement in productivity and quality. What they do not necessarily see is a similar increase in financial results, and in fact, some companies with the best quality in their industry fail to do business (Paul R. Neuen). Despite this balanced scorecard, it should be considered something more than a new measurement system, creative companies use this approach as a main and organizing framework for their management processes.

Companies find that by using this method, they have been able to:

Explain the strategy and agree on it.

Transfer (generalize) the strategy to the entire organizational body.

Set personal and unit goals based on strategy. Identify and adjust strategic initiatives.

Perform strategic reviews in a periodic and systematic way.

Feedback for learning and developing strategies (Kaplan and Norton)

Therefore Balanced Scorecard should be able to determine and explain the order of measures in causality relations between the performance measures and the drivers of these achievements. Some companies such as Honda, which use their capability to design and build engines for motorcycles, cars, and so on, as a competitive advantage use their unique capabilities for competition. One of the goals of businesses is in the growth, development and expansion stage

of current product lines, or in general to provide new products and services. About new products or new lines, instead of looking for a way to replace the product, we should think of a way to improve the situation. A gradual substitution can be done in the current production process and temporarily stop the sale of most of the old products and open the arena for new products. Market segmentation is done in terms of customer preferences in terms of price, quality, efficiency, mentality, reputation and relation and type of services. A balanced scorecard recognizes these goals well (Kaplan and Norton).

The organization's environment is divided into political, social, economic, legal, and information technology factors, each influences the organization's activities in specific ways. Any change in these factors can put pressure on the organization. These pressures can be considered in three groups of market, social and technological (Sarafizadeh, Asghar, p. 3).

The most important step is strategic planning that utilizes all previous studies and targeting and provides the best strategies. I.e, what is called priority strategy is achieved.

Human resource unit strategies include basic strategies that guide the organization and set studies to achieve the organization's mission and goals (Sarafizadeh, Asghar, p. 3).

2.8. BSC Balanced Scorecard Model

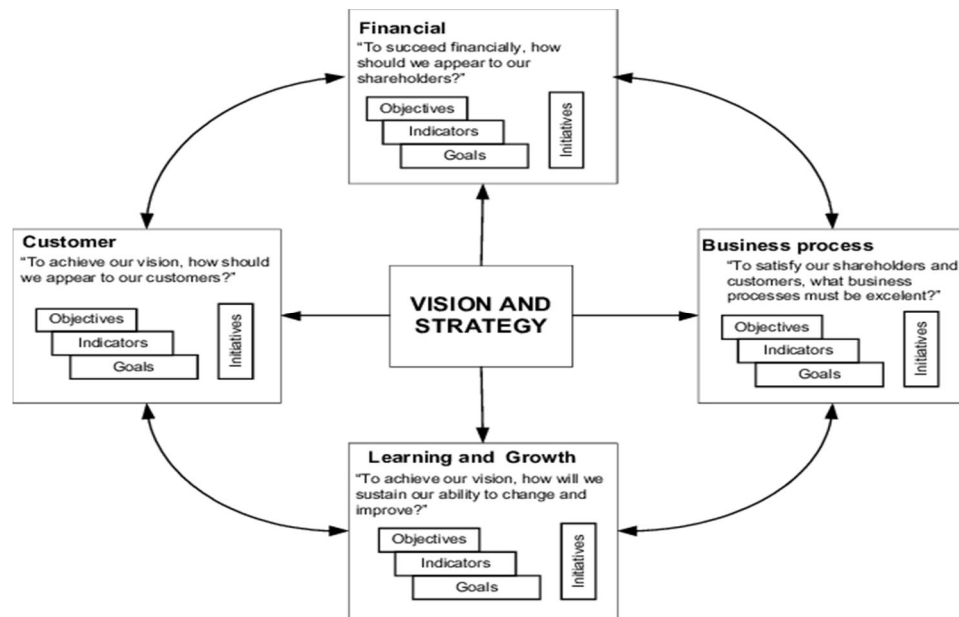


Fig. 2. Balanced Scorecard Framework from 4 perspectives

2.9. Features of the smart model

1. To be clear: to what achieve- how much effort it needs and how much cost it needs.
2. To be measurable: To be able to measure the goal, I.e to be able to set criteria that can easily identify the proximity to target.
3. To be capable: To be available and it is not necessarily that your goal to be impossible from others' view, but it should not be impossible from your point of view. Otherwise, your goal is only dream.
4. To be a realistic goal: Reality of the goal means the goal not to be illusion, for example, you cannot go to the market and buy a flying car, its invention is a goal but for the former is the imagination and for the latter is goal.
5. To have scheduling: predicting time for their goals, when they cannot find the power of it, they give up from determination. In fact, time is part of the goal, targeting before any work.

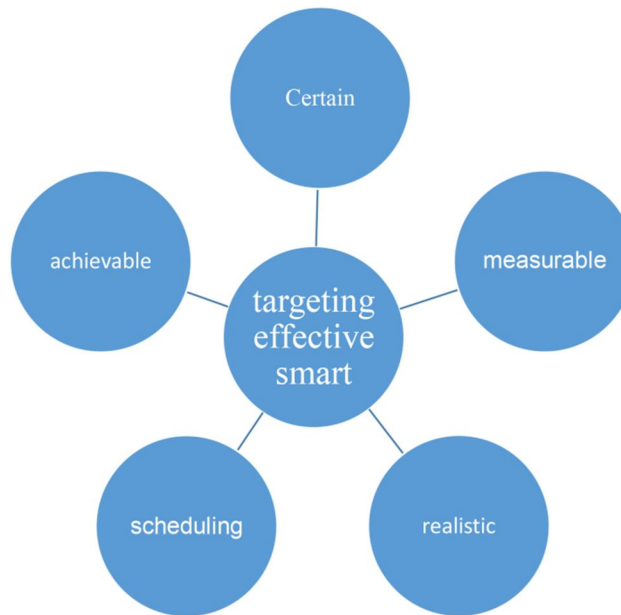


Fig. 3. The goals of the smart model

2.10. Model for Strategic Planning

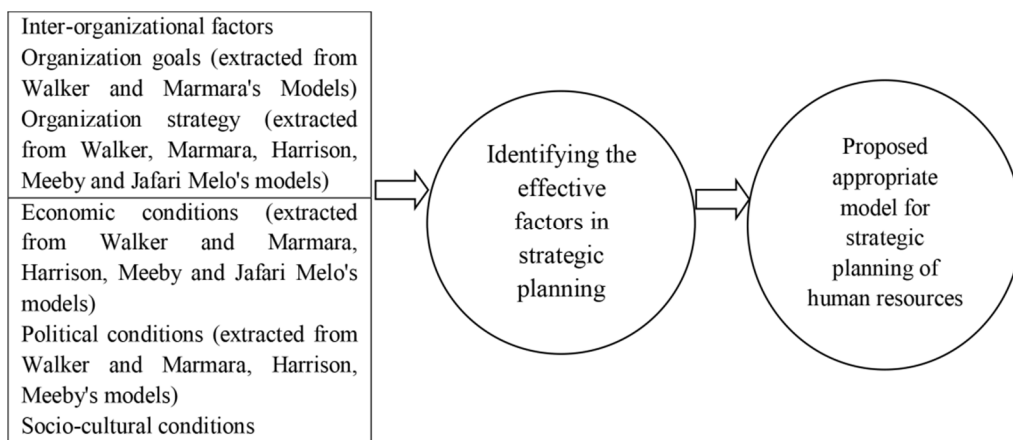


Fig. 4. Model of strategic planning

2.11. SERVQUAL Model

The SERVQUAL model derived from the term (Service Quality) has been presented in 1983 by Parasurman et al. to measure customer perception from service quality of a service organization. In the initial model, ten indicators were examined: accountability, competence, humility, credibility, security, accessibility, communication, customer perception, reliability and tangibility (Barghi, Majid 2015).



Fig. 5. The dimensions of the relationship between customer satisfaction and performance

3. Conclusion

Research Findings: Regarding the studies conducted, the application of BSC balanced scorecard model is very effective in designing strategic organizational planning. If the Smart Model tool is used effectively in targeting, the extent of transparency of the organization's variables will be increased increasingly and this issue will increase the degree of organizational productivity.

It is strongly recommended that, in production-oriented organizations that design and formulate strategic planning, the effect of key organizational factors (KSFs) with the components of the smart model that is based on indicators as: certain, measurable, achievable, realistic and scheduled to be matched on BSC model annually to be evaluated and reviewed the attitude of managers and experts based on the latest changes and scientific findings made in the external environment of the organization.

4. Suggestions

1. Designing and developing a strategic plan for all organizations with more than 5 workforces.
2. Using the BSC method for motion study of communication components between growth and learning centers, internal process units of the organization, analysis of financial information and investigation of customer behavior assessment
3. Defining and interpreting all operational objectives of the organization in a clear and certain way, and measuring and designing goals in a realistic, achievable way and based on accurate scheduling.
4. Designing and applying customized software for production-based organizations based on the capability of calculating the personnel learning coefficient rotationally (skill learning, scientific learning)

REFERENCES

- Afkhami Ardakani, M. 2016. Journal of Oil and Gas Exploration and Production of Research Institute of Petroleum Industry.
- Ali Ahmadi, A., & Fathullah, M. 2003. A Comprehensive Approach to Strategic Management, Knowledge Production Publications.
- Arabi, M., & Fayazi, M. Human Resource Management (Strategy & Action), 60-62.
- Azar Abadegan, A. 2016. Conference on Strategic Management of Kharazmi Information Technology Development Company, Paper of Applied Concepts of Strategic Planning and BSC Role in its Implementation.
- Barforoushan, S. 2011. Modern Balanced Scorecard Article of 6-Perspective Method Taken from 12-Step Book to Balanced Scorecard Implementation and Development and Determining Performance Indicators, Barga Publications.
- Barghi, M. 2015. Customer Experience, Customer Relationship Management Band Abdi, Ali 2012. Strategic Planning Model, Thesis for Receiving a Master's Degree in MBA Management.
- Behroozi, M. 2015. Conference Center of Effort- Tehran, Third International Conference, Balanced Scorecard Analysis in Evaluating Strategic Planning.
- Haddadi, F. 2013. Shemiranat School of Engineering, Thesis to receive Master's Degree in Information Technology Management, Scientific Department of Computer and Information Technology, Thesis Title: Multidimensional Evaluation of Isfahan Telecommunication Company Performance Using AHP and BSC Integration.
- Heidari, M. 2016. International Conference Center of Shahid Beheshti University 2016, Evaluation of University Performance Using Balanced Scorecard Model.
- Irannejad Parizi, M., Babaei Zakliki, M.A., & Sobhanollahi, M.A. Organizational Behavior Management.
- Iranzadeh, S., & Barghi, A. 2009. Journal of Industrial Management, Faculty of Humanities, Islamic Azad University, Sanandaj Branch, 4(8) / Summer 2009, Evaluating Performance of Organization with BSC Balanced Scorecard Model, Case Study.
- Panahi, F., & Afshar Kazemi, M.A. 2014. Journal of Management Accounting, Seventh year/No Twenty-second/ Fall 2014. Evaluation of Balanced Scorecard Model Using Case Dynamic Simulation: Saman Bank.
- Yaghoubi Nejad, R. 2009-2011. Performance Evaluation of Strategy of Tehran Water Treatment Plants Using BSC Balanced Scorecard Approach and Providing Solution.