Journal of American Science

Websites:
http://www.jofamericanscience.org
http://www.sciencepub.net

Emails:
editor@sciencepub.net
sciencepub@gmail.com

MARSLAND PRESS
Multidisciplinary Academic Journal Publisher

Studying the Determining Factors in Successful Implementation of Balanced Scorecard in middle and small Industries of Tehran Province

Nahid derakhshan [1], Zahra derakhshan [2]

[1.] Department of management and Social Sciences, Azad Islamic University, Malayer Branch
[2.] Department of management and Social Sciences, Payame Noor University, Tehran Branch
zahraderakhshan991@yahoo.com

Abstract: With its value-creating achievements in huge global companies and organizations, balanced scoreboard is still prominent among all different techniques and approaches toward the strategy and performance worldwide that has led to the most success, effectiveness, and efficiency. Among the achievements of balanced scorecard one can refer to focus (Pareto Principle), orientation, optimized assignment of budget and resources, transparency, saving, responsibility, accountability, service compensation commensurate with the performance, and above all, connecting the strategy to the operation. Since balanced scorecard is the most comprehensive approach to implement, control the strategy worldwide, in this survey we are going to study the determining factors of its successful implementation in middle and small industries. The statistical population of this research includes all active companies of middle and small industry among which 69 companies were selected as the sample. Tukey-B test and multiple regression are used to test the hypotheses of the research. The results show that the organizations that have implemented BSC have had a better performance in comparison to the organizations that have not implemented it. Additionally, according to the results, the factors of "management team", "business units", "human resources", and "budgeting and investment" are not significant in predicting successful implementation of BSC at the confidence level of 95%. Moreover, proper implementation of IT principle will lead to successful implementation of BSC in middle and small industries.
[Nahid derakhshan, Zahra derakhshan,. **Studying the Determining Factors in Successful Implementation of Balanced Scorecard in middle and small Industries of Tehran Provinces.** J *Am Sci* 2022;18(2):48-57]. ISSN 1545-1003 (print); ISSN 2375-7264 (online). http://www.jofamericanscience.org. 9. doi:10.7537/marsjas180222.09.

Keywords: Determining; Factor; Successful Implementation; Balance; Scorecard; Industry;

1. Introduction

The key to success of companies in the era of information technology and the products development, and services and processes is to promote the employees' skills, adopting superior information technology, and to regulate organizational instruction (Kaplan and Norton, 2009). Current financial accounting models fail to measure the related results and achievements and thus the organizations who intend to invest on gaining such capabilities have to use new financial methods of measuring the scale of success and feedbacks of the investments.

Current procedures in business world force the organization to focus on the process. Most such procedures (like labor force mobilization, customer expectation, and the increasing speed of today's business) are not going to stop in near future. Hence the emphasis on the process as an important element in the success of the organization's future will not stop to be continued. So the strategic assessment has to be a part of any wide process to be implemented. If the focus of planning is merely on the financial dimension, thus the time will waste. Today's strategies have to encompass the dimensions of customer process and the growth and learning as well to lead to the success of the organization (Smith and Ralph, 2010).

In their efforts to implement knowledge-based strategies in the organizations that are designed to compete in the industrial era, companies face several problems. Many organizations till the end of 1970s were doing their operations under a central controlling system that worked through huge organizational units. In such organizations, the strategies were planned at the upper levels of the organization and the strategies had to be implemented through a culture of command- and- control. The evolution of these strategies was very slow and thus the managers could use the systems of technical management control systems (like budget system). Such systems were designed for the companies of 19th centuries and they are not adequate for today's highly changing and dynamic environment. Many organizations still continue to use such systems, but it is obvious that the organizations need a new type of management system that is especially designed for managing the strategy and not the tactic.

In current competitive situation, the organizations need a system that not only measures all dimensions of the organization, but measure the level of organization's success in achieving its mission and its vision. Such a system can help the managers in their strategic planning and decision-makings.

The first framework proposed by Kaplan and Norton on 1992 for the balanced scorecard was based on the use of four perspectives: financial perspective, customer perspective, internal business processes perspective, and learning and growth perspective (Kaplan and Norton, 1992). Figure 1 shows this framework. The main logic for the relationship between different perspectives can usually be defined as follows:

- In order to succeed financially, we need our customers' satisfaction so that they buy our products. Besides, in order to reach more efficiency, we have to be superior in key and important processes.
- In order to gain the customer satisfaction, we have to be so superior in key processes that our products meet the needs of the customers.
- In order to improve the processes and to meet our customers' needs, we have to learn and develop the needed basics and infrastructures.

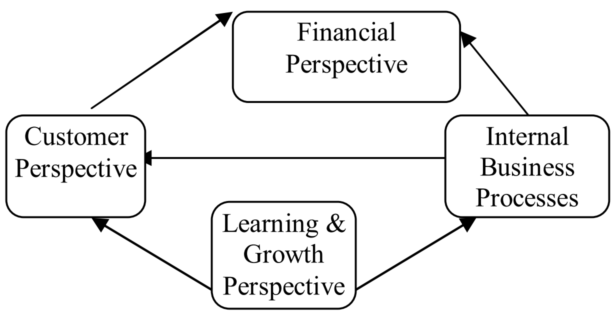

Fig. 1. Framework of Balanced Scorecard Model
Source: Olve, Nils-Goran, 2005: 18

The idea of scorecard was originally used to clearly and transparently express the strategy through a special form that was integrating a very limited set of indexes. A very important characteristic of balanced scorecard form is the idea of results and motivators, so the scorecard is described as the business logics.

Scorecard has to explain a set of hypotheses on which the business is built. For example, improvement in the processes will lead to increase the number of the customers and consequently to more incomes. Of course this path- destination (cause and effect) relationship is not new in its own, but what is new, is the emphasis on the importance of these relationships as part of the performance report. If such relationships are missed, then the performance report will be merely an inconclusive report of key numbers (Olve and Sjostrand, 2005, 40).

Balanced scorecards offer a very useful tool to enable the employees to understand the situations of their companies. If the organization intends to achieve needed dynamics for competing the competitors in a long term base, such an understanding is vitally important, because the organization will begin to control the indexes of the scorecards and the documentations offered by BSCs will help organization to reach its mission and goals in a sooner term of time (Smith, 2010, 185).

Accordingly, the employees will obtain better understanding and will have more motivations. Thus they will show lesser resistance against the changes and they will play a positive role in implementing the decisions of the company. Moreover, the organization will be improved in the learning because its learning will be more understandable and the organization will continuously develop its capabilities. All these advantages worth to introduce and use scorecards. Since the idea of scorecard is very simple, sometimes its necessity and the need for assigning resources and management focus on scorecards is underestimated. The organization may look at a scorecard project merely as a performance measurement project that is more detailed in comparison to similar projects (Chitgarha, 2010, 184).

Strategy planning and the connection between strategy and operation are still periodic, variable and discrete. Using systemic approach and tools for managing strategy and operation, the companies can connect strategy to operation. A comprehensive and coherent management system can help companies to overcome the difficulties and failures in implementing their strategies (especially new and evolutionary strategies) (Kaplan and Norton, 2009). The companies often fail to implement strategies with their operation management because they lack a macro system for integrating and directing these to critical process.

2. Effective factors on successful implementation of balanced scorecard

2.1. Top management

Move the changes forward through top management. To create a strategy-based organization, there will be need to something more than tools and processes. The experiences show that the most important condition to success is the sense of attachment and participation in the top management team. Since balanced scorecard is not an assessment project but an evolution project, thus if the top managers are inactive leaders for this process, no evolution will happen and the strategy will not implemented and the opportunity of the successful performance will be wasted. According to John Kotter, to make the evolution, the leaders have to do three initiatives: (1) Creating a sense of strong need and necessity; (2) Creating a conducted coalition; and (3) Codifying a vision and strategy (Kaplan and Norton, 2008).

2.2. Budgeting and investment

Make the strategy the routine work of your staff. Managing directors of successful organizations cannot implement new strategies alone, but they need the active participation of their employees. Any strategy-based organization needs all its employees understand the strategy and do their routine work in a way that leads to the success of that strategy. This is not a matter of top-down command, but a matter of top-down interaction. In this interaction, the strategy is conveyed from the up to the down as a whole, and not through a commanding hierarchy. Then the people and departments of the organization at the lower levels can regulate their goals in lights of more wide principles. Finally, successful organizations connect their reward and compensation system to the balanced scorecard. The managers of such organizations prefer rewarding based on group performance over rewarding on the basis of personal works. Their rewarding criteria are the criteria of assessing the business units and different parts of the organization (Kaplan and Norton, 2008).

2.3. Information technology

Make the strategy a continuous process. The researches show that 85% of management teams assign less than 1 hour a month to discuss the strategy, thus it is not surprising that the strategies fail to be implemented. Successful companies in strategy management use a process named double-loop process in which the tactic management and strategy management are connected to each other in order to shape an integrated process. In this regard, (a) strategy connects to budgeting process; (b) management sessions are conducted in a regular (monthly, fortnightly, etc.) as the simple management sessions, so that a wide range of the managers can talk about the strategy; (c) a process is created to learn the strategy and to be adjust with it. Indeed, as soon as implementing balanced scorecard, the feedback systems receive the progress reports and the organizations can test their strategic hypotheses (ibid).

2.4. Business units

Translate the strategy into operational terms. Balanced scorecard provides an instruction to combine the available elements and materials of the organization to create a long- term value. This method offers a framework to explain and convey the strategy in a regular and knowingly terms. If we fail to explain the strategy, we cannot expect its implementation. Through translating the strategy into a logical structure of a strategy map, the organizations can bridge the regulation and implementation of the strategy and show how the intangible assets cam lead to tangible (financial) results (Kaplan and Norton, 1999).

2.5. Human resources

Direct the organization toward the strategy. In order to the organization performance gets more optimized than the total sum of the performance of its different parts, the individual strategies have to be merged in each other. On the other hand, since the traditional organizations are designed around the task proficiencies, each of these units are a barrier for the strategy implementation and face the organization to some difficulties of coordination and communications of the units to each other. Strategy-based organization break through these barriers. The managers of these organizations replace the official reporting structure of with the strategic themes and priorities; and these are the themes that spread the coordinated priorities throughout the organizational units (Kaplan and Norton, 2008).

3. Literature review

Ernest and Young (1998) studied a statistical sample of 275 managers and showed that the ability to implement the strategy is more important than the quality of the strategy itself. In another research conductedon the management consultants, Kiechel (1992) showed that less than 10% of well-formulated strategies are successfully implemented. In yet another research, Fortune (1999) published an article about the failure of well-known managers. The article concluded that emphasis on the vision and strategy will lead to this wrong belief that what all needed to be successful is a proper strategy; but in most cases (approximately 70%), the real problem is not a bad strategy but a bad implementation of the strategy (Charan and Colvin, 1999). One of the difficulties of implementing the strategy is that the sustainable and exclusive ways of creating the value in organizations are changing but the assessment tools for that strategies are not changed tantamount with them. In the industrial economics, the companies create value by their tangible assets through transforming the raw materials to the products. A studied done by Brookings Institution (1982) showed that the official value of tangible assets of industrial organizations is equal to 62% of these organizations' market value. 10 years later, this proportion was reduced to 38% (Blair, et al, 1995) and recent studies estimate that the official value of tangible assets of the companies at the end of 20th century is something between 10 to 15% of the companies' market value (Webber, 2000). By and large, it is obvious that the value- creating opportunities are moving away from intangible assets management of the organizations.

Kaplan and Norton (1990) conducted a research on 12 superior American companies and studied the methods and criteria of the performance appraisal in these companies. The results of this study showed that most successful companies direct their strategic goals toward four categories of financial, customer, internal processes, and learning and growth fields. After publishing this article and consulting the companies on performance appraisal for four years, Kaplan and Norton published a book on Balanced Assessment. According balanced assessment method, the organization's strategy is translated to measurable assessment indexes and through its implementation, a system can be made for fulfilling the strategy and strategy management. Many American companies have implemented balanced assessment since its appearance.

4. Conceptual framework

Introducing balanced scorecard method as an official process for implementing strategy, in this research we have used the following model that provides the key factors of implementing this method to study it in middle and small industries.

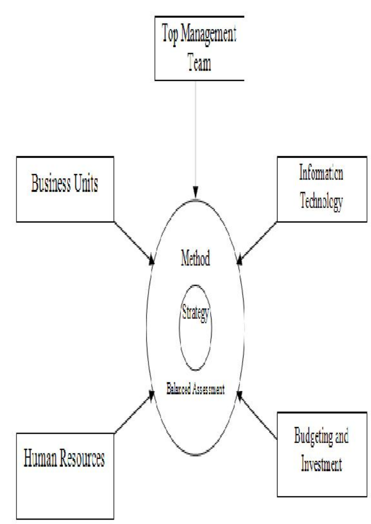

Fig. 2. Conceptual Framework of the Research
Source: Kaplan and Norton, "Balanced Scorecard: Measures the Drive Performance, Harvard Business Review; (1992) ,71-79

5. **Hypotheses**

5.1. Main hypothesis

Organizations that observe the principles of BSC implementation are more successful in implementing BSC method than the organizations that lack such principles.

5.2. Subsidiary hypotheses

a) Proper implementation of "management team" principle leads to the successful implementation of BSC in middle and small industries.
b) Proper implementation of "information technology" principle leads to the successful implementation of BSC in middle and small industries.
c) Proper implementation of "budgeting and investment" principle leads to the successful implementation of BSC in middle and small industries.
d) Proper implementation of "human resources" principle leads to the successful implementation of BSC in middle and small industries.
e) Proper implementation of "business units" principle leads to the successful implementation of BSC in middle and small industries.

6. **Methodology**

In terms of data gathering, this research is a descriptive one, and since the related data are studied for the distribution of the characteristics of statistical population through sampling, thus this research is a survey that is being conducted in a periodic way.

6.1. Statistical population

Generally, the population is a combination of all cases that fit with specific characteristics (Irannejad, 2009). The statistical population of this research includes around 24 companies of middle and small industries that have implemented balanced scorecard method. Since the numbers of the small and middle companies that have not implemented BSC were very high, due to the difficulty of accessing them and the time-consuming process of such a task, we just consider the organizations that were similar to BSC implementers in their size and type of the activities. Totally 48 cases of such companies were found and included in the research.

6.2. Defining middle and small industries

In a general definition, a small company is a company that has a small share in the market and is administered personally by its owner or owners and has not the middle management level in its structure. Thus such a company is not so big that can suitably access the capital market. A small branch of a big company cannot be regarded as a small company because it is supported technically and financially by its mother company (Analoui and Karami, 1992a, 21).

Some researchers (Scott and Bruce, 1987, 46) believe that using qualitative criteria can better differentiates middle and small organizations from the big ones. For example, Scott and Bruce (1987) have presented a qualitative definition for the middle and small industries. They believe that middle and small industries have three characteristics:

a) Their management is usually independent and they are usually managed by their owners;
b) Their capital is usually provided by persons or small groups;
c) Their scope of activity is local. Their workers and owners are in a small society; but their markets do not necessarily locate in that local society.

There is not any exact definition of small company and each country defines such businesses differently in terms of its own special conditions, because such businesses are too much in number (Malekinejad, 2006).

According to the definition of Iranian Institute for Trade Studies and Research, small industries ate those industries that are administered and managed independently. These are industrial units that work with different size of investment, labor force, and productions and they are the vital parts of the growth of the global economy (Iranian Institute for Trade Studies and Research, 2008).

6.3. Sample and sampling

Most researches on the whole statistical population are usually very time-consuming and non-economic, thus the researcher can administer the sampling (Momeni, 2000). Sampling method is indeed to select a sample from the whole sampling units that is called sampling framework (Irannejad, 2009). In this research we have used simple random sampling method. Regarding the limitation of the number of statistical population, we have used Morgan Sample Size Table to reach to 45 cases for the first population (who have not implemented scorecard) and 24 cases for the second population (who have implemented scorecard).

6.4. Data collection instrument

To collect the data and in order to achieve the goals of the research, we have used questionnaire. This questionnaire is a closed one with 5-item Likert scale. The questionnaire has been designed on the basis of 6 hypotheses of the research in 6 main parts.

6.5. Validity and reliability of the questionnaire

Validity shows that how much the measuring instrument measures under-studied characteristic (Danayi-fard, et al, 2008). One way to determine the validity of data is content validity. To determine the content validity, a sample of the questionnaire delivered to some experts of management sciences to assess the validity of the questionnaire. They reviewed the questionnaire and confirmed its validity.

Reliability is the repeatability of measurement instrument in similar conditions (Hafeznia, 2005). One way to assess the reliability of data gathering instrument is to assess the logical fitness between the questions by Cronbach's alpha. The calculated alpha for all variables of this research equals to 93% that shows a high rate of reliability for the questionnaire of this research.

7. **Data analysis**

In this research we have used 5-item Likert scale; thus regarding the interval nature of measuring instrument, we have used Pearson correlation test in order to test the relationship between the variables. As the results of the test of correlation between dependent and independent variables (Table 1) shows, all variables of the study have a direct significant relationship with dependent variable i.e. successful implementation of BSC.

Table 1. Summary of the results of correlation test

Variables of the study		Results of the correlation test		
Independent Variable	Dependent variable	Coefficient	Significance level	Result
Management team principle	Successful implementation of Balanced Scorecard	0.526	0.000	Positive correlation with 99% confidence
Business units principle		0.464	0.001	Positive correlation with 95% confidence
Human resources principle		0.523	0.000	Positive correlation with 99% confidence
Information technology principle		0.677	0.000	Positive correlation with 99% confidence
Budgeting and investment principle		0.641	0.000	Positive correlation with 99% confidence

To test the existence of the performance difference in implementing BSC among the organizations that have chosen and followed balanced scorecard framework as an official process for their organization's strategy, and the organizations that miss such a framework we have used variance analysis test. The results of the first hypotheses are presented in table 2.

Table. 2. Results of variance analysis test

	Sum of squares	Degree of freedom	Mean squared	F	Significance level
Between the groups	85.654	1	85.654	427.060	0.000
Within the groups	9.627	48	0.201		
Total	95.281	49			

As shown in table 2, the significance level is less than 0.05 thus the test is significant, i.e. the respondents believe that there is a significant difference between the organizations that have an official principles for implementing the strategy and the organizations that miss such principles. Regarding the results of regression analysis, and the mean values of the successfulness of implementing BSC in two groups of the organizations we can conclude that the organizations that have implemented balanced scorecard have had a better performance in comparison to the organizations that have not implemented balanced scorecard. Hence the first hypothesis of the research is confirmed.

7.1. Multiple regression

Since the hypotheses of this research intend to study the effects of an independent variable on a dependent variable, we have used regression method to analyze the hypotheses. The results of multiple regression analysis are shown in table 3.

Table 3. Results of multiple regression analysis

Dependent variable	Prediction variable	Non-standardized coefficients		Standardized coefficients	t	Significance level (Sig. t)	Correlation coefficient (R)	Determination coefficient (R2)	Adjusted Determination coefficient
		Variable coefficient in equation (B)	Standard Error (SE)	Beta (B)					
Successful implementation of Balanced Scorecard	Management team principle	0.237	0.175	0.186	1.352	0.183	0.739	0.546	0.494
	Business units principle	-0.16	0.243	-0.011	-0.066	0.948			
	Human resources principle	0.227	0.246	0.144	0.922	0.362			
	Information technology principle	0.486	0.228	0.345	2.129	0.039			
	Budgeting and investment principle	0.309	0.216	0.225	1.433	0.159			

As shown in table 3, following results are obtained at 95% confidence level:

- Management team principle for successful implementation of BSC is not significant at 95% confidence level (Sig. = 0/183>0/05).
- Business units principle for successful implementation of BSC is not significant at 95% confidence level (Sig. = 0/183>0/05).
- Human resources principle for successful implementation of BSC is not significant at 95% confidence level (Sig. = 0/948>0/05).
- Information technology principle for successful implementation of BSC is significant at 95% confidence level (Sig. = 0/039<0/05).
- Information technology principle for successful implementation of BSC is significant at 95% confidence level (Sig. = 0/159>0/05).

8. **Results of the research**

a) In the first hypothesis, it is claimed that the organizations which consider the principles of implementing BSC are more successful in BSC implementation than the organizations that miss such principles.

The results of variance analysis confirmed the significant difference between the two groups of organization at 99% level. Then, comparing the mean scale of the organizations' success in implementing BSC showed the organizations that have some official principles for their strategy have a better performance in BSC implementation than the organizations that miss such principles.

b) Regarding the claim that the proper implementation of management team principle affects the successful implementation of BSC in middle and small industries, the results of Pearson correlation confirmed the significant relationship between the two categories at 99% confidence level; i.e. there is a significant relationship between the independent variable of "management team principle" and the successful implementation of BSC.

Regarding beta coefficients (β) in regression analysis, we can claim that the successful implementation of BSC is affected by the proper implementation of "management team principle". The results of simple regression show that 52% of the changes in BSC successful implementation are justified by the proper implementation of "management team principle". But the results of multiple regression show that the proper implementation of "management team principle" is not significant for predicting BSC successful implementation at 95% confidence level.

c) Regarding the claim that the proper implementation of "business units principle" affects the successful implementation of BSC in middle and small industries, the results of Pearson correlation confirmed the significant relationship between the two categories at 95% confidence level; i.e. there is a significant relationship between the independent variable of "business units principle" and the successful implementation of BSC.

Regarding beta coefficients (β) in regression analysis, we can claim that the successful implementation of BSC is affected by the proper implementation of "business units principle". The results of simple regression show that 46% of the changes in BSC successful implementation are justified by the proper implementation of "business units principle". But the results of multiple regression analysis show that the proper implementation of "business units principle" is not significant for predicting BSC successful implementation at 95% confidence level.

d) Regarding the claim that the proper implementation of "human resources principle" affects the successful implementation of BSC in middle and small industries, the results of Pearson correlation confirmed the significant relationship between the two categories at 99% confidence level; i.e. there is a significant relationship between the independent variable of "human resources principle" and the successful implementation of BSC.

Regarding beta coefficients (β) in regression analysis, we can claim that the successful implementation of BSC is affected by the proper implementation of "human resources principle". The results of simple regression show that 52% of the changes in BSC successful implementation are justified by the proper implementation of "human resources principle". But the results of multiple regression analysis show that the proper implementation of "human resources principle" is not significant for predicting BSC successful implementation at 95% confidence level.

e) Regarding the claim that the proper implementation of "information technology principle" affects the successful implementation of BSC in middle and small industries, the results of Pearson correlation confirmed the significant relationship between the two categories at 99% confidence level; i.e. there is a significant relationship between the independent variable of "information technology principle" and the successful implementation of BSC.

Regarding beta coefficients (β) in regression analysis, we can claim that the successful implementation of BSC is affected by the proper implementation of "information technology principle". The results of simple regression show that 67% of the changes in BSC successful implementation are justified by the proper implementation of "information technology principle". The results of multiple regression analysis show that the proper implementation of ""information technology principle" is significant for predicting BSC successful implementation at 95% confidence level.

f) Regarding the claim that the proper implementation of "budgeting and investment principle" affects the successful implementation of BSC in middle and small industries, the results of Pearson correlation confirmed the significant relationship between the two categories at 99% confidence level; i.e. there is a significant relationship between the independent variable of "budgeting and investment principle" and the successful implementation of BSC.

Regarding beta coefficients (β) in regression analysis, we can claim that the successful implementation of BSC is affected by the proper implementation of "budgeting and investment principle". The results of simple regression show that 64% of the changes in BSC successful implementation are justified by the proper implementation of "budgeting and investment resources principle". But the results of multiple regression analysis show that the proper implementation of "budgeting and investment resources principle" is not significant for predicting BSC successful implementation at 95% confidence level.

9. Conclusion and suggestions

In this research the determining factors of successful implementation of balanced scorecard in middle and small industries of Tehran province was studied, the conceptual framework of the research was based on Kaplan and Norton's model. The results of Pearson correlation coefficient and simple regression analysis and variance analysis showed that all hypotheses of the research are confirmed, but referring to multiple regression analysis, only the effect of proper implementation of "information technology principle" on the successful implementation of BSC in middle and small businesses is confirmed. Based on the results of this research, following suggestions can be offered:

a. According to the results of the research, the principles of proper implementation of management team, business units, human resources, information technology, and budgeting and investment have effects on the successful implementation of balanced scorecard in middle and small industries. Thus the executive managers and the decision-makers of middle and small companies have to understand the mentioned principles, extract the indexes of each principle, and regulate their goals and strategy on the basis of their own local conditions, because the implementation of scorecards depends on the proper implementation of mentioned principles.

b. The results of the research showed that the organization in which there are some official principles for their strategy have a better performance in implementing BSC in comparison to the organizations that lack such principles. Thus the managers have to begin regulating an official process for the strategy if they have not did so up to now (in this research, balanced scorecard method have been studied as a model for the official process of regulating the strategy). Regarding the environmental and competitive pressures, managers have to regulate an official and coherent process to regulate and implement the strategy. In the same line with available theories, the results of this research suggest that the organizational performance of the companies that have official principles for their strategy is better than other companies. At the current competitive situation the companies cannot gain a sustainable success without strategic planning, and implementing and reviewing their strategy.

References

1. Azar, Adel & Momeni, Mansour, (2000), Statistics and Its Application in Management, SAMT Publication Co., Tehran. [in Persian]
2. Danayifard, Hasan; Alvani, Mehdi & Azar, Adel, (2008), Methodology of Quantitative Research in Management; A comprehensive Approach, Saffar Publications, Tehran. [in Persian]
3. Hafeznia, Mohammadreza, (2005), An Introduction to Methodology in Humanities, SAMT publications, Tehran. [in Persian]
4. Iranian Institute for Trade Studies and Research, (2008), How the Middle and Small Agencies can Compete in Order to Develop the Exportation, Iranian Institute for Trade Studies and Research, Tehran. [in Persian]
5. Irannejad, Mehdi, (2009), Methodologies in Social Sciences, Managers Publication, Tehran. [in Persian]
6. Kaplan, Robert, S. & Norton, David, (2007), The Balanced Scorecard: Translating Strategy into Action, translated by Ramin Salmasi and Jamile Sheikhi, Iranian Institute for Trade Studies and Research, Tehran. [in Persian]
7. Kaplan, Robert, S. & Norton, David, (2009), Building a Strategy-Focused Organization, translated by Parviz Bakhtiari, Iranian Industrial Management Publications, Tehran. [in Persian]
8. Kaplan, Robert, S. & Norton, David, (2009), Achievements of Implementing Balanced Scorecard, translated by Hasan Nasrollahzade and Farshid Mohammadnejad, Iranian Center for Industrial Researches and Training, Tehran. [in Persian]
9. Malekinejad, Amir (2006), "An Analysis of the Role of Middle and Small Industries in Economic Development", Rahbord Quarterly, No. 8. [in Persian]

10. Olve, Nils-Göran & Anna Sjöstrand, (2005), Balanced Scorecard, translated by Alireza Soleimani, Iranian Center for Industrial Researches and Training, Tehran. [in Persian]
11. Smith, Ralph, (2010), Business Process Management and the Balanced Scorecard: Using Processes as Strategic Drivers, translated by Masoud Chitgarha and Maryam Razehkisami, Rasa Publications, Tehran. [in Persian]

7/11/2021