

## Evaluating the Performance of Companies Using Principles of Strategy-Focused Organization, Case Study: Iranian Steel Firms

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**Abstract:** Assessment systems are necessary in the present age with dramatic changes in management knowledge. Thus, lack of assessment systems in different sectors of an organization to evaluate resources, staffs, strategies and objectives signs for presence of illness in the organization. Organizations are always involved with dynamic markets which require speed, compatibility and alignment as key procedures for achievement of competitive advantages. Any organization needs an evaluation system to be aware of its activities utility in complex and dynamic environments. On the other hand, lack of control and evaluation systems means imbalance relationships in internal and external environments of organization which leads to senility or death of organization. Since evaluation of organizations is done to realize weaknesses and strengths, to increase abilities and competencies and to make managerial decisions; this paper seeks to assess Iranian steel firms using principles of strategy-focused organization. So far, key success factors in organizations have been studied by researchers. However, this study focuses on principles of strategy-focused organization. These principles are considered as independent variables. The dependent variables of the present research are performance results. To conduct the research, the questionnaire is used and distributed in the statistical sample including a number of managers in steel firms.

**Keywords:** Balanced scorecard, performance evaluation, strategic alignment, strategy map, strategy-focused organization

### INTRODUCTION

In recent two decades, organization's performance evaluation has been an attractive concept which has resulted in many innovations in the theoretical and practical fields. Performance evaluation is defined as "quantification process of operations efficiency and effectiveness". Research has shown that performance measurement systems could play an important role in supporting managerial development in these companies (Garengo *et al.*, 2005). The final goal of a performance evaluation system is to improve performance of the organization. Since 1980s, many researchers have stressed on restrictions of financial scales and performance-based scales (Dixon *et al.*, 1990; Johnson and Kaplan, 1987). Therefore, many efforts were done to design suitable frameworks and models for performance evaluation and management such as performance measurement model developed by Sink (1991), performance measurement matrix (Keegan *et al.*, 1989), performance model (Cross and Lynch, 1989), shareholders analysis model (Donaldson and Preston, 1995), performance prism (Neely and Adams, 2001), Balanced Scorecard (Kaplan

and Norton, 2001), business excellence models (e.g., Baldrige's and EFQM awards) and performance measurement system design (Pohl and Förstl, 2011). A good performance measurement system can help an organization through following five ways (Bourne, 2002):

- Determining current situation of organization
- Transferring orientation and destination of organization to others
- Encouraging efforts in key sections of organization
- Simplifying the learning
- Influencing on staffs' behavior

To remove weaknesses of performance measurement systems working based on only financial measures, Kaplan and Norton introduced Balanced Scorecard idea in 1992 (Kaplan and Norton, 1992). They stressed that successful corporations do not only trust in financial scales, but also they do assess their performance from four perspectives: financial, organization, staffs and growth and learning. Many researchers have reported and highlighted the shortcomings of financial measures (Mohammadzadeh *et al.*, 2011; Rezazadeh *et al.*, 2011).

In spite of countless investment in presenting new performance measurement frameworks, financial measures still are applied in various levels. In every country, financial measures are the most frequently measured and over half of those surveyed report that over 50% of their measures are financial (Neely *et al.*, 2008).

In the current world with high technological advances, markets movement and appearance of new rivals, many companies are losing their competitive advantages. Survival and success of organizations in the mysterious and competitive environment in which change, speed, complexity and uncertainty are its main specifications depend on effective strategies and continuous improvement of performance. Thus, design and determining strategies and objectives, planning and implementing strategies, control and evaluation of performance are tools to achieve continuous performance improvement and effective strategies. Regarding important role of strategy management in achieving sustainable results and making competitive advantages, organizations should upgrade their processes and management of strategies according to world class best practice. Knowing the current situation of strategy management systems and indentifying present gaps and weaknesses could be one of Iranian organizations' concerns.

The present research tries to assess strategy management systems in Iranian steel firms using principles of strategy-focused organization introduced by Kaplan and Norton and compare these firms with excellent American and European steel companies.

**Performance measurement and organization's performance:** Performance is literary defined as state or quality of activities. Neely *et al.* (2002) define performance measurement (system) as follows:

- Measurement of a process's performance is quantifying efficiency and effectiveness of activities.
- A performance measure is an indication for quantification of efficiency and/or effectiveness of an activity.
- A performance measurement system is a set of measures used for quantification of efficiency and effectiveness of an activity.

Peter Drucker stresses that "anything is not measureable cannot be managed". This word describes the purpose of performance measurement in a simple term. However, it should be noted that management is just one aim of performance evaluation. Other objectives of performance measurement are as follows:

- Alignment of strategy and activities
- Operation control

- Management of and interaction with shareholders
- Quality
- Motivation and granting to staffs
- Responsibility

Performance measurement systems are designed as tools for monitoring and supervising. Nanni *et al.* (1990) define performance measurement as a process to ensure an organization implementing strategies to achieve its objectives. Sink (1991) believes in performance measurement as a complicated, challenging and important task. Franco-Santos *et al.* (2007) presented 17 various definitions of business PMS, underlining that a no-consensus situation on PMS definition can "inhibit the development of the field". Marchand and Raymond (2008) clarified the notions that underlie performance measurement systems and proposed an information system-based characterization and definition of PMS, that is, as a performance management information system. For the extent literature review on performance measurement see Martinez *et al.* (2010), Nudurupati (2011) and Bititci *et al.* (2011).

Since performance level of an organization is a function of effectiveness and efficiency of organization's operations, performance measurement is a process to determine value of efficiency and effectiveness of the organization. In fact, performance measurement is not a purpose, but it is a tool for effective management. Results of performance measurement show what has happened but they do not show why they have happened. To use performance measurement results effectively, an organization needs to transfer the measurement to the management. This transfer is well known as performance management is research on organization' performance (Amaratunga and Baldry, 2002). Generally, performance measurement systems have following restrictions and problems:

- Problems related to auditors
- Lack of communications and feedback systems
- Problems related to evaluation consequences
- Extra cost to profit
- Shortage of information

**Balanced scorecard:** In late 1980s, many papers were published in American and European journals discussing on inefficiency of performance evaluation methods. Kaplan and Norton (1992) developed Balanced Scorecard idea in 1992 to remove weaknesses in performance evaluation systems working on only financial measures. Kaplan and Norton found out that successful companies evaluate their performance regarding four perspectives:

- **Financial:** Financial objectives represent long-term goals of organizations and they are designed

according to appropriate return on investments on fixed assets of business. Using Balanced Scorecard is very aligned with such vital objectives. In fact, Balanced Scorecard can clarify organization's objectives and balance organization's financial objectives in different stages of organization's life and growth.

- **External customers:** The word customer's perspective used in Balanced Scorecard indicates customer and market segmentation by which companies start their competition. In fact, depending on target and customer type, revenue's parts are defined in financial objectives. Firms in customer's perspective determine their revenue measures according to customer view on satisfaction, sacrifice, maintaining and identifying and profitability. To do so, corporations identify values that are considered as measures for activities in target markets and for specific customers. These values are those measures and drivers by which target customers accomplishments can be evaluated.
- **Internal processes:** In this regard, managers determine the most important processes necessary to achieve shareholders and customers objectives. Companies should try developing objectives related to business internal processes after they determined financial objectives and measures and they considered factors of customers' needs. This encourages companies to arrange and define measures related to business internal processes regarding customers' and shareholders' needs.
- **Growth and learning:** The fourth and last perspective in the Balanced Scorecard is related to objectives and measures which are effective on learning and growth of organization. The objectives which were determined in financial, external customers and internal processes' perspectives show a way that organization should step in to have excellent performance. However, objectives are set in the growth and learning perspective drives the organization to achieve its excellent goals.

Kaplan and Norton (1992) believed that the above perspectives make a balanced view in any organization. Also, they believe that no working scope would be ignored while there are measures for each of four perspectives.

Balanced Scorecard was at first a performance measurement and management method. Then, it was used as a tool to implement strategies (Hao-Chen, 2009). Currently, it is known as a strategic management system. Balanced Scorecard is something more than a system for performance measurement and measures analysis. Balanced Scorecard is a method in which organization's

strategies are translated into a set of measurable indicators. Also, by applying this method, a system is created to measure strategy realization and strategic management. The Balanced Scorecard is a framework which helps organizations to translate strategies to operational objectives driving organization's behavior and performance.

**Strategy map:** The most important concern of any organization is implementation of strategies which are developed. A strategy says that how an organization tries to create sustainable values for shareholders. Organizations should use their unseen assets to create sustainable values. A strategy map provides a visual framework for integration of organizational goals in all four perspectives of Balanced Scorecard. In addition, a strategy map draws causal relations which relate expected results of customer and financial perspectives to desirable performance of internal processes (operation management, customer management and innovation, legal and social processes). A strategy map is a tool that relates organizational strategies and processes to systems helping implementation of strategies. This tool gives a direct and clear view to staffs to know how their activities are connected to comprehensive objectives of organization and coordinate them to do their tasks better (Kaplan and Norton, 2004). In addition, a strategy map detects specific abilities of unseen properties (human resources, information resources and organizational resources) which they are necessary for desirable performance of internal processes. The strategy map solves lack of integration problem by presenting a framework to show causal relations in one page. The statements stated in the strategy map are considered as measures, objectives and efforts of Balanced Scorecard. Strategy map and Balanced Scorecard enable organization's staffs to have common understanding from strategies. However, the strategy map, by itself, is a static picture from the strategy. Three parts should be added to the strategy map to make it dynamic:

- **Quantification:** determining objectives and analyzing causal relations in the strategy map
- **Timetabling:** determining the ways to create values by strategic concepts in long-/medium-/short-term periods in order to create sustainable balanced values
- **Selecting efforts:** selecting strategic investments and practical plans which prepare organization to achieve desired performance in the considered time horizon

**Strategy alignment:** Companies should consciously seek ways which make the whole organization more valuable than its units. Alignment is vital for creating synergy in support and business units. A novel management and measurement system which is based on Balanced

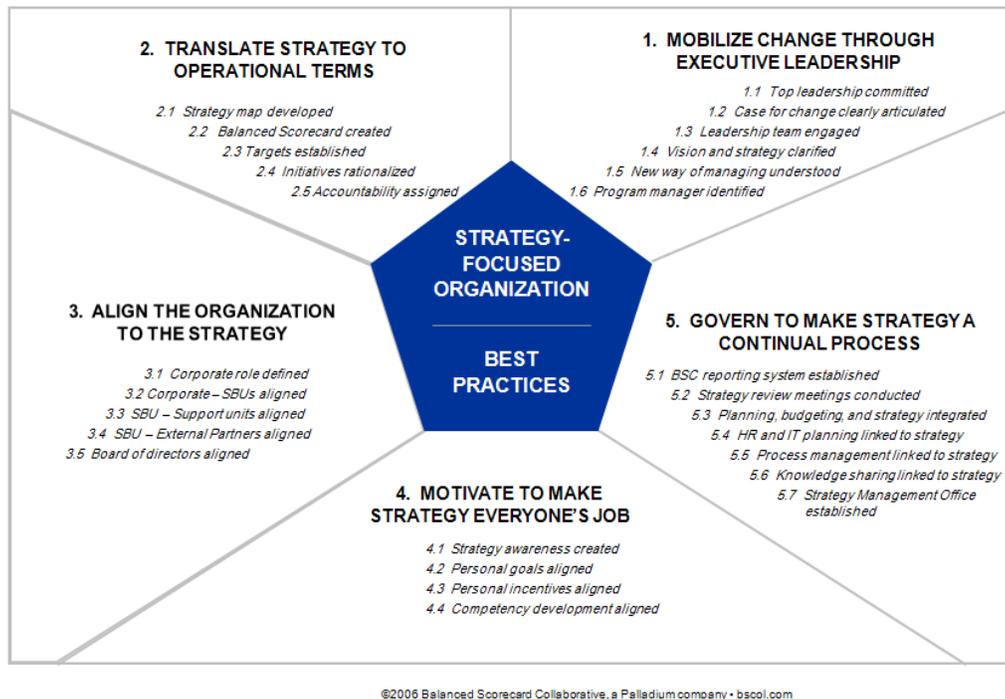


Fig. 1: The principles of a strategy-focused organization (Kaplan and Norton, 2006)

Scorecard and strategy map helps organization to define and realize benefits of alignment in the organization. Basically, corporations with the most profit from their performance management systems apply better strategies in alignment of business and support units than others.

Understanding how alignment in company can be done has many benefits for the company. According to Chandler and Porter, strategy is precedent of systems and structures. Thus, organizational strategy should firstly be analyzed. Then, how to provide strategy map and Scorecards needed to align organization's structure with strategies in different levels of organization should be analyzed.

Many firms showed that strategy can be successfully implemented through alignment of four elements: strategy, organization, employees and management system. Alignment of any of four elements is necessary but not enough for success. Integration of four elements is sufficient for success of management process (Kaplan and Norton, 1996).

Basically, synergy in organization is achieved through alignment of strategies. These alignments are as follows:

- Alignment of financial and customer's strategies
- Alignment of internal processes and growth and learning strategies
- Alignment of support activities

- Alignment of board of directors and investors
- Alignment of external shareholders
- Cascading the processes

Alignment is not a one-step process. Alignment process management includes followings:

- Creating alignment
- Managing and sustaining alignment
- Responsibility

**Strategy-focused organization:** Balanced Scorecard method helps successful organizations to implement a novel management system which is able to manage strategies. This novel management system has three dimensions as follows:

- Strategy as center of organizational planning
- Focus on strategies (strategy-focused organization)
- Organization of employees

The successful institutions apply Balanced Scorecard method to create strategy-focused organization. Basically, managers of successful organizations believe in alignment and focus on two key factors needed for organization's success. Also, each strategy-focused organization follows five principles as follows (Kaplan and Norton, 2001) (Fig. 1):

- Mobilize change using executive leadership
- Translate the strategy to operational words
- Align the organization with the strategy
- Make strategy everybody's task
- Make strategy a continuous process

Two major measures to select strategy-focused organization (excellent organization) are as follows:

- Do they use strategy maps and Balanced Scorecard in their strategy management?
- Do they have any evidence on remarkable quantitative and approved results showing that they have implemented the strategies successfully?

**Research hypothesis:** The main hypothesis of the present research is that Iranian steel firms are lower level than world class steel companies according to principles of strategy-focused organization. Also, the present research has minor hypotheses as follows:

- Iranian steel firms are better in the first principle of strategy-focused organization than other principles
- Iranian steel firms are worse in the fourth principle of strategy-focused organization than other principles

**RESEARCH METHODOLOGY**

Since the current study evaluates Iranian steel corporations relative to world rank companies, the present research is a practical study. Also, the present study analyzes current situation of Iranian steel firms and tries to identify gaps between them with world class steel companies. Thus, this research is categorized as a case study.

In the present research, to evaluate Iranian steel firms, 27 managers of three steel firms including Mobarake-Isfahan, Zobe-Ahan Isfahan and Foolad-Khoozestan are considered as the statistical population. The research was conducted during year 2011 within the three mentioned firms. The three firms are the main steel processing plants in Iran located in the center and south-west regions of Iran. Using shared sampling method and regarding the statistical sample size, 60 questionnaires were distributed among the managers. Totally 45 questionnaires were returned. Analytical framework of the present research includes organization performance assessment principles, strategic management, Balanced Scorecard, strategy map, strategy alignment and strategy-focused organization.

The present paper includes four phases. The first and second phases include literature review and problem statement. The third phase includes analysis/selection of organizations, filling out questionnaires and statistical analysis. The fourth phase includes hypothesis tests, results, conclusion and recommendations (Fig. 2).

**Data collection and analysis:** In this research, performance evaluation measures of strategy-focused organization's principles are used to measure the dependent variable (performance). Also, to assess performance of Iranian steel firms, Palladium institution's questionnaire is used.

In order to calculate reliability of questionnaire, Cronbach's alpha coefficient is used. The high value of Cronbach's alpha 0.7989 shows relative reliability of used questionnaire. The questionnaire used in the present study is based on Palladium institution and includes 28 questions about five principles of strategy-focused organization. The budgeting of questions regarding the principles is as follows:

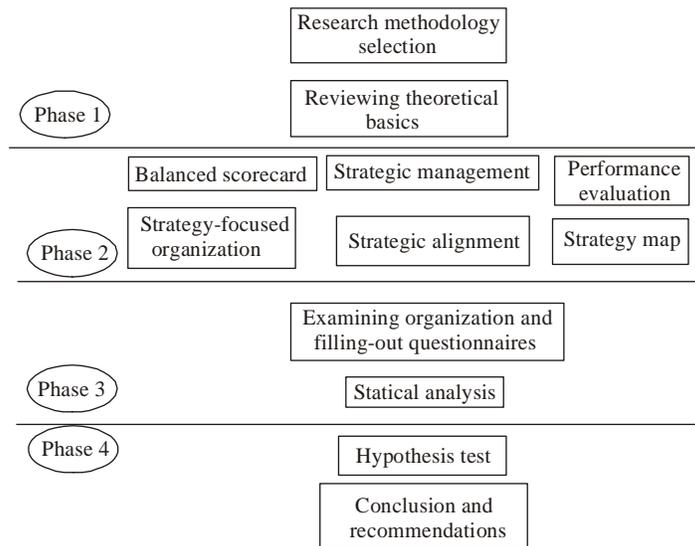


Fig. 2: Research's framework

- Five questions about the first principle
- Five questions about the second principle
- Six questions about the third principle
- Four questions about the fourth principle
- Eight questions about the fifth principle

In addition, to examine validity of the questionnaire, Spearman's correlation coefficient test is applied. The Spearman's correlation coefficient 0.872 indicates enough validity of the questionnaire to gather data.

**RESULTS**

To evaluate the performance of Iranian steel firms, both financial and non-financial measures are used. In fact, due to non-profit nature of firms, financial measures by themselves cannot show the performance well. Therefore, to examine the research hypotheses, results of evaluating three steel firms using principles of strategy-focused organization are enough. For ranking the present research's data, Likert scaling 1 to 6 is applied. To test consensus of managers about independent variables, Kendall's coefficient test is applied. In confidence level 95%,  $p\text{-value} = 0.00 < 0.05$  indicates that each factor is not independent from another.

To examine situation of three Iranian steel firms compared with world class steel companies, Wilcoxon test is applied. In confidence level 95%,  $p\text{-value} = 0.043 < 0.05$  indicates a significant difference between three firms and world rank firms.

Table 1: Friedman's test results

	N	Mean	S.D	Min	Max
Steel Industry	5	3.022	0.27986	2.6	3.36
Best Practice	5	4.34	0.16733	4.2	4.6
Chi-Square	5				
df	1				
Sig.		0.025			

Min: Minimum; Max: Maximum

Table 2: Friedman's test results (ranking of five principles in Iranian steel industry)

Ranks	Test statistics		
	Mean rank		
SFO#1	3.61	N	180
SFO#2	3.39	Chi-square	133.266
SFO#3	2.90	df	4
SFO#4	2.24	Sig.	0.00
SFO#5	2.85	-	-

Table 3: Steel firms' performance according to principles of strategy-focused organization

Principles of strategy-focused organization	Steel industry score	Excellent firms score	Gap (score)	Gap (%)	Rank
Mobilize change using executive leadership	3.36	4.40	1.04	23.63	1
Translate the strategy to operational words	3.16	4.60	1.44	31.30	4
Align the organization with the strategy	3.01	4.30	1.29	30.0	3
Make strategy everybody's task	2.60	4.20	1.60	38.09	5
Make strategy a continuous process	2.98	4.20	1.22	29.05	2

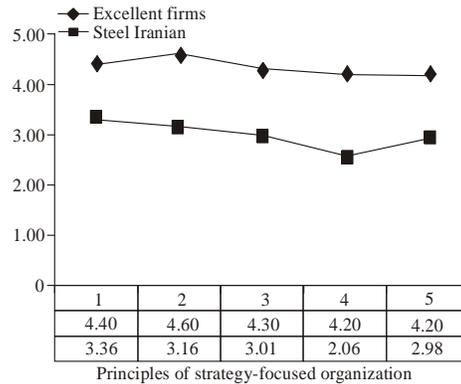


Fig. 3: Comparison of Iranian steel firms with excellent firms

To examine situation of three Iranian steel firms than each other, Kruskal-Wallis test is applied. In confidence level 95%,  $p\text{-value} = 0.025 < 0.050$  indicates approval of the major research hypothesis (Table 1).

To examine research hypotheses, Friedman's test is applied. In confidence level 95%,  $p\text{-value} = 0.000 < 0.05$  indicates that Iranian steel industry has better performance in the first principle than in other principles while it has worse performance in the fourth principle than others (Table 2).

Table 3 and Fig. 3 shows major weaknesses of steel firms regarding principles of strategy-focused organization based on their gap.

**CONCLUSION**

The present research evaluates strategic management system of Iranian steel firms using strategy-focused organization's pattern. Also, the current study compares strategic management system of Iranian steel firms with excellent American and European steel companies. In the present research, different factors related to strategy-focused organization are measured. Results of the present study show that Iranian steel industry has weaknesses in implementing principles of strategy-focused organization. Iranian steel firms have better performance in the first principle of strategy-focused organization than other principles. In fact, Iranian steel firms have the best and worst performance regarding executive managers' commitment and clarification of changes, respectively.

Probably, the most difficult issue of making Iranian steel firms strategy-focused organization is persistence. Generally, implementation of new strategies in steel firms requires extensive changes which organization's managers are to make. Leadership style of executive managers of such steel firms is one important factor in high commitment of executive managers. In fact, executive managers of Iranian steel firms could communicate with staffs well. Also, they use Balanced Scorecard to communicate and transfer mission and vision statements and strategies to staffs.

Iranian steel firms have fairly good performance in the second principle of strategy-focused organization. According to managers' point of view, steel firms have the best and worst performance in the measures development of strategy map and responsibility, respectively. In steel firms, strategy evaluation methods and presenting visual view of strategy map provide a rational and comprehensive technique to describe strategy. They translate desirable results and hypotheses to realize results clearly. They guide all organization's units and staffs to understand strategy. Also, they help organization's units and employees to know how to realize strategies through alignment with strategy. Speed of new strategy realization in steel firms indicates that their success is not due to introducing a new product/service, new investments, or developing unseen assets or new ideas, but also their success is due to investments on abilities and strengths (perceivable and unseen) which have been in organization. Continual training and suitable train courses on Balanced Scorecard and drawing strategy map is a factor that helps steel firms to act well in developing strategy map. Training courses help organization to transfer strategy map to lower levels of organization. Regarding measure responsibility, firms should train people who can implement strategic projects well.

Iranian steel firms show fairly good performance in the third principle of strategy-focused organization. Steel firms have the best and worst performance in measures alignment of board of director and alignment of support units, respectively. Steel firms through alignment of strategy, organization, staffs and management system can implement strategy well. Steel firms include a set of business units which each has specific customers and strategies. Top managers in head offices should determine how to create value in their units. Balanced Scorecard provides a framework to clarify value creation methods. Iranian steel firms do not have good performance in the fourth principle of strategy-focused organization. Steel firms have the best and worst performance in measures strategic awareness and alignment of individual objectives, respectively. Steel firms use innovative ways to communicate and transfer strategy to employees. Also,

they use traditional methods such as holding meetings and distributing magazines and new methods such as internet to convey their strategy and balanced evaluation concepts to employees.

Iranian steel firms do not have good performance in the fifth principle of strategy-focused organization. Steel firms have the best and worst performance in measures knowledge share and process improvement, respectively.

Steel firms, through continual access to balanced evaluation reports for staffs, have improved strengths of problem solving, opportunity creation and knowledge share abilities. Review and feedback of strategic information helps organization to have better performance. Steel firms, using Balanced Scorecard method, integrate strategic planning and budgeting processes to overcome hinders against implementation of strategies. Operational budget shows improvement of current operations.

Briefly, steel firms have fairly good performance in the first three principles of strategy-focused organization. But they have poor performance in the fourth and fifth principles. Followings are recommendations to improve steel firms' performance and future research directions:

- It is recommended that steel firms create teams to develop objectives
- It is recommended that steel firms consider top and middle level managers' strategies
- It is recommended that steel firms integrate units to provide common objectives
- It is recommended that the present research's methodology is applied to other Iranian industries such as petrochemical and car manufacturing

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