EVALUATION OF HADID FIRM'S PERFORMANCE USING THE BALANCED SCORECARD (BSC) MODEL

Ahmad Fakharian1*, Abolfazl Danaei[2], Hadi Hematian[2]

[1]Department of Management, Science and Research Branch, Shahroud University, Shahroud, Iran* Corresponding Author. Tel: +989170170366*
[2]Department of Management, Semnan Branch, Islamic Azad University, Semnan, Iran

Abstract
Large body of research grounded on applying Balanced Scorecard (BSC) and balanced assessments exist, but, the use of Balanced Scorecard (BSC) is less seen in industry sectors. Hence, the matter of importance in this research mentioned the very notion of exploring the utilization of Balanced Scorecard (BSC) in Strategic planning process across industrial companies in general, mentioned that this has been taken in the case study of this research on Hadid firm's performance whereby Evaluation of Hadid firm's performance using the Balanced Scorecard (BSC) model is the major aim of this study. The present paper in terms of scope of time, results, logic, objectives and process has been mentioned respectively a Cross-sectional, applied, inferential, descriptive and combined type of study. To define the relations and implement the model and techniques used, experts' views were asked in this paper. The library method has been used to access theoretical data where Field survey method has been used to extract data of the industry. The most important tools used in this paper can be mentioned as interview with experts where Analytical Hierarchy Process Model and TOPSIS method have been used as the most important data analysis methods. The results showed that efficiency score in perspective of development and learning, domestic processes, customer and financial matters in Hadid firm reported 35.12%, 37.89%, 45.45%, 81.25%, respectively. Further, the other results of this study can be mentioned as identification of the processes required to improvement where customer relationship processes and research and development process identified as the processes required to increasing the firm's performance and efficiency.
Keywords:Balanced Scorecard (BSC); Analytical Hierarchy Process Model; TOPSIS method

Introduction

Strategic evaluation of industry accounted increasingly as one of the first and fundamental strategic planning parts mentioned essential in human's life. One of the main strategic management's communications, i.e. correspondences has conveyed as positioning. Importance of this doubled in Today's knowledge-based economy and turbulent environment particularly at manufacturing firms. To date, a variety of models have been used to evaluate the strategic position of organizations where a different approach addressed to analyze the environment.
One of the most strong Strategic models in this context mentioned the very Balanced Scorecard (BSC) at which the entire facets of an organization is examined on the whole (Karkeh Abadi, 2010). An overview of the academic Balanced Scorecard (BSC) method and use and advantages of this method in evaluating and recognizing the weaknesses and strengths of organization's performance, mentioned proposing efficient strategies and measuring

organization's performance which lead to a big improvement in organization's performance. Further, since the organizations' resources are limited, to use the organizational capitals and resources required to examine the existing difficulties and problems, better use of this method in order to lead to better consequences, this is clear for everyone (Karkeh Abadi, 2010).
By forming the organizations, along different periods, have been used of several patterns and models for evaluating. Organizations in proportion to their needs, at first they only used some of confined criteria and indexes. Extension of activities and area of organizational performance, dynamism of organization's environment and discussing the subjects and managerial modern problems, for instance, social responsibility, customer satisfaction, etc made organizations to not content by confined indexes. Therefore, general and multi-dimensional models had formed and evolved. Considering the circumstances of the evaluation systems forming, general goal in traditional systems of performance evaluation was only the learning and judging about the performance itself and has been caused to performance controlling in different levels but in modern perspective, philosophy and purpose of evaluation, besides the control, have been focused on development and improvement and stable growth of performance. In this regards, Balanced Scorecard (BSC) method found as the most useful modern method used by roughly 70% American firms(Kaplan and Norton, 1996). Kaplan and Norton in their latest book named the samples of organizations who gained efficient outcomes by applying the Balanced Scorecard (BSC) including Royal Canadian Mounted Police and U.S. Department of Defense (Kaplan and Norton, 2007). Hence, the strengths of balanced scorecard (BSC) in evaluating strategic performance in order to develop the steps to implement this method to analyze the positions across industry and then examine the developed model to apply Balanced Scorecard (BSC) in Hadid firm as a case study.

Literature review

The most important studies existing in how implement balanced Scorecard (BSC) in recent years (1994-2013) together with the most important results have been proposed in table 1.

The conceptual research model

This model is based on a Simple input models, processes and outcomes of the organization. Inputs mainly consist of human, financial and physical resources belonging to the organization; the experts specialized in the field of knowledge management and the learner organizations accounted the information essential component of such resources. Most of the criteria using in the industrial sectors at organization, derivate of the saving based on inputs calculated generally based on cost, budget or the entire personnel. The other factor mentioned essential is the very notion of efficiency and performance mentioned the outcomes of organization for this; it can be measured as a quantity. Along this, production of a manufacturing factory and the cases like this can be accounted for this purpose. According to this criterion, to calculation, the ratio of inputs to outcomes is mainly taken where this would be the criterion of organization's performance giving the quantitative data on the real success of the organization.

Eventually, efficiency and performance of the organization is taken somehow deals with the organization's outcomes, needs and requirements making measurement of the performance difficult. Generally, the industrial sector at organizations are required to meet the needs and

resolve the difficulties occur or seen in the light of informed of them, having sufficient proficiency and skills.

Louise Kloot et al. (2000) in a study entitled "Strategic Performance Management: A Balanced Approach to Performance Management Issues in Local Government" The drive for reform in the public sector worldwide has focused attention on the measurement of public sector organizations' performance. This is particularly true in local government. Local government has traditionally been concerned with measuring the delivery of primary objectives, or results, at the expense of secondary objectives, or the determinants of organizational performance. Current strategic management literature suggests that there should be a strong linkage between strategic plans and performance measures. Kaplan and Norton's (1992) balanced scorecard and Fitzgerald et al's (1991) results and determinants framework can provide this linkage. This paper reports on research into performance management systems in local government using the four dimensions of the balanced scorecard: financial, community, internal business processes and innovation and learning. It shows how the focus in this system of local government has been on the results of council work ? . Financial performance and to a lesser extent on how the community views performance. Local government performance measurement pays much less attention to the determinants, or means of achieving long-term, sustained organizational improvement internal business processes, and innovation and learning. Whilst these issues are recognized as important, there are few measurement processes in place to manage performance in these areas. Strategic performance management demands an approach that recognizes the importance of a focus on both results and the means to achieve these results. The paper highlights a suggested framework for strategic and balanced local government performance measurement.

Boland , Tony & Alan Fowler (2000) " A System perspective of performance management in public sector organizations" Measuring organization performance plays an important role for developing better strategic plans. In today's competitive environment, organizations attempt for the product quality or offering the service, delivery, reliability capability and the customer satisfaction. These properties are not measurable only by traditional financial criteria and we need a method, which could consider non-financial factors as well. The present study of this paper proposed a hybrid of balanced score card (BSC) and data envelopment analysis (DEA) method for an empirical study of banking sector. The study proposes a model for assessing bank performance, which is an example of governmental credit and financial services institutes. The study determines different important factors associated with each four components of BSC and uses analytical hierarchy process to rank the measures. In each part of BSC implementation, we use DEA for ranking different units of bank and efficient and inefficient units are determined.

Lingle et al.(1996) From balanced scorecard to strategic gauges: is measurement worth it?, said top-performing companies are characterized by agreed-on and understandable measures. Presents results from a survey of executives which asked them to judge the value and the extent to which they would bet their jobs on information in six strategic performance areas, e.g. customer satisfaction. It is found that measures on operating and financial efficiency are the only well-defined ones and are most often linked to management reviews, organizational change and compensation. Advises that there are four mechanisms which contribute to the success of measurement-managed organizations ™ agreement on strategy, clarity of communication, focus and alignment efforts, organizational culture. It is discovered barriers

to effective measurement (ill-defined objectives, too much trust in informal feedback systems, entrenched measurement systems and measuring activities, not results).
Zoe Radnor et al.(2000) Performance management in the public sector: fact or fiction? New Labor came to power in the UK in 1997, there has been a drive to improve the effectiveness of public services through the use of private sector principles. From, the modernizing government White Paper to the development of the Public Services Productivity Panel who, produced a raft of White Papers tackling health, social services, welfare and criminal justice. This paper, through the analysis of two studies, will reflect on some of the general literature on public sector performance management and the findings and recommendations of the Public Services Productivity Panel in order to attempt to answer whether performance management in the public sector is currently fact or fiction? In other words the paper will aim to develop and answer, to a certain extent, if it really possible to raise productivity and performance within public sector organizations through developing performance management systems based on private sector experience. In this regards, the most reasonable reason to measure performance in industrial sector lied in its potential value for three groups of addresses as managers, employees and consumers. Three fundamental stages exist in developing performance measurement:
Measurement was possible in traditional of the cost and controlling the accounts. Anyhow, during the 1980s, the financial perspective of the performance criteria felt mentioned inappropriate such that the multi-dimensional performance measurement frameworks applied(1992-1994); later since the middle 1990, it was felt that the literature grounded on measuring the performance by means of the topics on the strategic scenarios and use of such scenarios to show the relationship between key indicators of performance was influenced; this is reflected in the industrial sector likewise other sectors(Randor & Mc Guire, 2004).

Mike Bolton et al.(2003) declared the expectations of public sector organizations have changed. The public increasingly expects them to have private sector performance focus but public sector accountability. Discusses the particular issues of establishing performance measures (and a performance-related culture) in the public sector while demonstrating (as well as delivering) “proper” and efficient use of public funds.
If measuring the performance taken in serious and the appropriate transmission from private sector to industrial sector, the cases as follows can be come to realize:
1-better services: managers required to receive better information and data to do their tasks in their managerial control and decision making.
2-more responsiveness: this means in a way better reporting. To access this aim, it is needed to a balanced set of significant criteria chosen with accuracy.
Such criteria have to be significant, i.e. they are required to measure the key factors of success; provide perspectives of different insights; reflect the concerns by all beneficiaries; being used in general not in partial; make balance between quantitative and qualitative, not found Annoying and confounding.
According to criteria defined, there exist clear opportunities to use a balanced measurement method named Balanced score card. In general, if industrial sectors desired to use the performance management effectively, have to take the tools including balanced score card and then are required to use them in their behavioral level rather than operational level.
Although advantages of the systems measuring the organization’s performance are clear, access to a real response within industrial organizations is difficult and change of big centers' structure in nature lacks this. Hence, the problem lied in the fact that the tools like Balanced

score card becomes a troubleshooting tool rather than a communication tools within the organization. It is along assumed in industrial sector that in the light of multiple stakeholders, the different requirements of customers, consumers and citizens, this occurs (Randor & Mc Guire, 2004).

In the model proposed in figure 1, the facets needed for performance management affecting industrial sector have been taken; the facets include financial perspective, customer perspective, internal process perspective and learning and growth perspective. Figure 1 indicates that a correlation exists among these facets such that the change in each facet causes the change appears in other facets required building an integrative process like Balanced Scorecard (BSC) to evaluate organization's performance. According to the studies defined in Kaplan and Norton study, The process of creating a balanced scorecard (1993) to evaluate performance includes the stages as follows:

- Developing vision (develop strategic document)
- Identification of the organization growth processes and capabilities
- Identifying critical success factors to achieve the vision (critical success factors)
- Developing indicators taken essential for monitoring progress within the organization
- Building Balanced Scorecard (BSC)

Hence, in this paper, to design Balanced Scorecard (BSC) and evaluate Hadid firm's performance, the components indicated in figure 2 are discovered and examined.

Research methodology

The present paper in terms of scope of time, results, logic, objectives and process has been mentioned respectively a Cross-sectional, applied, inferential, descriptive and combined type of study. To define the relations and implement the model and techniques used, experts' views were asked in this paper. The library method has been used to access theoretical data where Field survey method has been used to extract data of the industry. The most important tools used in this paper can be mentioned as interview with experts, note taking, tables and figures where Analytical Hierarchy Process Model and TOPSIS method have been used as the most important data analysis methods.

Data analysis

Extraction of the Semnan Hadid's firm strategic planning: an interview with the experts working at Semnan Hadid firm and deciding with refer to the analysis group's views and by coordinating with the Hadid's firm strategic planning committee, conducted the theoritical studies and decided and collected documents existing beyond the image of firm's vision and position over 100 years, the provisions to propose the strategies and aims have been proposed in table 1. Hence, the matrix provided for matrix of communication levels, strategies and visions of Balanced Scorecard (BSC) have been proposed in table 2. Further, drawing a tree diagram for decisions by objectives with regard to the visions of Balanced Scorecard (BSC) shown in figure 3.

Extraction of the Semnan Hadid firm strategy map: according to tables 2 and 3 determined the bilateral communications regarding the aims by assistance from expert group, figure 4 would be provided as the map of strategy for Semnan Hadid firm.

Extraction of the processes affecting Hadid firm's goals: processes affecting Hadid firm's goals with regard to the documents existing within the firm proposed in table 4. According to

the basis of TOPSIS method and experts' views and sufficient terms, table 5 would be proposed; in the end, according to the stages to solve TOPSIS method, vicinity coefficient for each of processes would be as that of in table 6, where the average balanced processes taken 0.35 with regard to experts' views, so that the selected processes have been proposed in table 7. On the basis of the major aims with regard to Hadid firm's records and documents and experts' views, table 8 would be represented. Further, the calculations using Analytical Hierarchy Process Model for major aims would be conducted to have sufficient weight where defining it avoided proposing here.

Performance Evaluation of Semnan Hadid firm

According to the calculations of weights and ideal values and current situation for the indicators to measure Performance Evaluation of Semnan Hadid firm, the results have been proposed in table 9.

Improvement Planning across Semnan Hadid firm: according to what discussed above, improvement in the processes based on the output of TOPSIS method prioritized, found with the highest effect in access to aims within the organization. After the organization performance evaluated and the efficiency indicator determined throughout the organization, to improve and resolve the difficulties, the organization focused on the processes with higher prioritization. According to the prioritization of processes, the processes found required to improvement regarding the expert group's views. Further, the reason built gap between current and ideal function levels examined and analyzed in this stage. The results have been proposed in table 10.

Conclusion

Agostino & Arnaboldi(2012) investigated how to use a performance measurement system associated to organizational dimensions. In an overview to use performance measurement system, the differentiation between diagnostic and interactive control as an analysis framework was approved. In empirical level, the present paper conducted a case study of Semnan Hadid firm approved the obtained results.

Yuksel & Dagdeviren(2010) conducted a study in a manufacturing firm within turkey. The most important results can be referred as extraction of effective weights adapted with activity environment within performance measurement system where the levels of weights using Analytical Hierarchy Process Model extracted and applied.

Quezad et al.(2009) conducted his study around manufacturing firms within Chile. The most important results of his study can be referred as access to financial processes as the most important process for the firms where learning and development process mentioned as the process with the least importance within the society. In this study, the learning and development process and financial processes respectively with performance gap equal to 64.88% and 18.75% mentioned with the least and upmost importance.

Lee et al.(2008) in A fuzzy AHP and BSC approach for evaluating performance of IT department in the manufacturing industry in Taiwan, stated that, in this ever-changing world, information technology (IT) is a must for the survival of a company, and the functions of IT department is becoming increasingly important. The assessment of IT department is critical to understand how the department contributes to organizational and strategic goals. Because IT department performs many tasks that cannot simply be measured by monetary units,

evaluation methods that solely rely on financial measures are not adequate. The objective of this study is to construct an approach based on the fuzzy analytic hierarchy process (FAHP) and balanced scorecard (BSC) for evaluating an IT department in the manufacturing industry in Taiwan. The BSC concept is applied to define the hierarchy with four major perspectives (i.e. financial, customer, internal business process, and learning and growth), and performance indicators are selected for each perspective. A fuzzy AHP (FAHP) approach is then proposed in order to tolerate vagueness and ambiguity of information. A FAHP information system is finally constructed to facilitate the solving process. The results provide guidance to IT departments in the manufacturing industry in Taiwan regarding strategies for improving department performance. The constructed information system is suggested to be a good tool for solving other multiple-criteria decision-making problems.

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Table 1. the most important studies on implementing balanced scorecard (BSC) in recent years(1994-2013)

Results	Authors	Year
This paper aimed to investigate use of balanced scorecard (BSC) as a mechanism facilitated and let the managers to achieve their strategic goals and develop fuzzy systems in order to evaluate functions existing in their management systems. This paper further aimed to develop a system to evaluate functions to use fuzzy language to model managers' mind to access information and data. The results of such studies can help the organizations to evaluate their strategies and adopt a modern management approaches in their daily task.	Lin, Qing-Lian, Liu, Long, Liu	2013
This study investigates the use of a performance evaluation system (PMS) related to organizational aspects. In considering use of PMS, the distinction between diagnostic and interactive control, as a framework of analysis adopted. In the experimental level, study conducted in two years with numerous case studies of seven Italian companies proved the result.	Agostino, Deborah, Arnaboldi, Michela	2012
The purpose of this study is suggesting strategies through BSC for the PL3 service providers. In the end, proposed framework entered into a discussion in PL3 company.	Ducq & Lenny Koh	2012
This study was conducted in companies working under Iran Khodro's supervision. From the most important results of this study, access to an algorithm to depict the strategy plan can be referred.	Jasebi, Mohammadi nejad & Nasrolahzad eh	2011
This paper aimed to investigate how to increase individuals' performance by means of training. This study conducted using the information to train BSC to 500 P & S companies. As an ultimate outcome by positive effects of training on organization's performance, it is suggested somehow the automatic strategic planning system using current BSC trained to board.	Creamer & Freund	2010
Quezad et al.(2009) conducted his study around manufacturing firms within Chile. The most important results of his study can be referred as access to financial processes as the most important process for the firms where learning and development processes mentioned as the process with the least importance within the society. In this study, the learning and development processes and financial processes respectively with performance gap equal to 64.88% and 18.75% mentioned with the least and upmost importance.	Quezada & Palominos & Godoy & Ross	2009
The objective of this study is to construct an approach based on the fuzzy analytic hierarchy process (FAHP) and balanced scorecard (BSC) for evaluating an IT department in the manufacturing industry in Taiwan. The BSC concept is applied to define the hierarchy with four major perspectives (i.e. financial, customer, internal business process, and learning and growth), and performance indicators are selected for each perspective. A fuzzy AHP (FAHP) approach is then proposed in order to tolerate vagueness and ambiguity of information. A FAHP information system is finally constructed to facilitate the solving process. The results provide guidance to IT departments in the manufacturing industry in Taiwan regarding strategies for improving department performance.	Lee, Chen and Chang	2008
This study was conducted in a series of industrial metallurgy in Poland. The most important results can be referred as designing a model to evaluate organization's performance, increase the system's efficiency from 56% to 59% during 3 years.	Michalska	2005
They argue that traditional performance evaluation is misleading, particularly while the innovation and progress in competitive world found with higher importance in nature. In such conditions and terms, short-term financial successes would not be sufficient, but, it is better to address long-term successes.	Banker, Chang, Janakiraman and Konstans	2004

They stated that only 23% of organizations constantly reviewed used informal models to confirm and support their computing system. Yet, this 23% found with more profit in assets for about 2.95% and partners stock for about 5.14%.	Ittner, Larcker	2003
The balanced scorecard is a popular choice because of its acceptance in the business and academic communities around the world. Harvard Business Review has introduced balanced scorecard as the most effective thought in 20th century and applying it is very easy if a company able to define its strategic goals and intentions clearly. Division of strategic goals by proper standards help the firm to transform its strategies worldwide and supervise progress and success or implementing its strategies.	Evans	2002
This Support the idea that the relationship between employees based on feedback regarding the standards increases cooperation, and overview how to use balanced scorecard to receive more data of banks' functions to understand domestic and foreign beneficiaries strengths.	Forza and Salvador	2001
Lee examined the balanced scorecard as a tool to assess the performance of commercial banks in China, mentioned the value of System of Management Performance lied in the factors such as Customer, internal business processes, employee training and growth factors and financial factors.	Li	2001
They decided to introduce the concept of balanced scorecard. As thought, it is mainly attempted to reflect showing the equilibrium between traditional and financial aspects and three non-financial sources including customer, commercial processes and innovation.	Kaplan & Norton	1996
Finds that measures on operating and financial efficiency are the only well-defined ones and are most often linked to management reviews, organizational change and compensation. Advises that there are four mechanisms which contribute to the success of measurement-managed organizations agreement on strategy, clarity of communication, focus and alignment efforts, organizational culture. Discovers barriers to effective measurement (ill-defined objectives, too much trust in informal feedback systems, entrenched measurement systems and measuring activities, not results).	Lingle and Schiemann	1994 - 1996

Source: findings of research

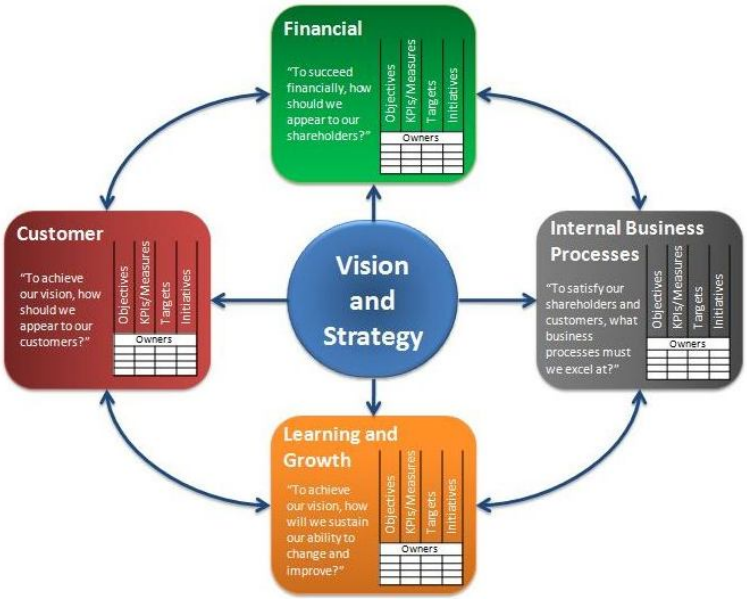

Fig 1. Conceptual research model

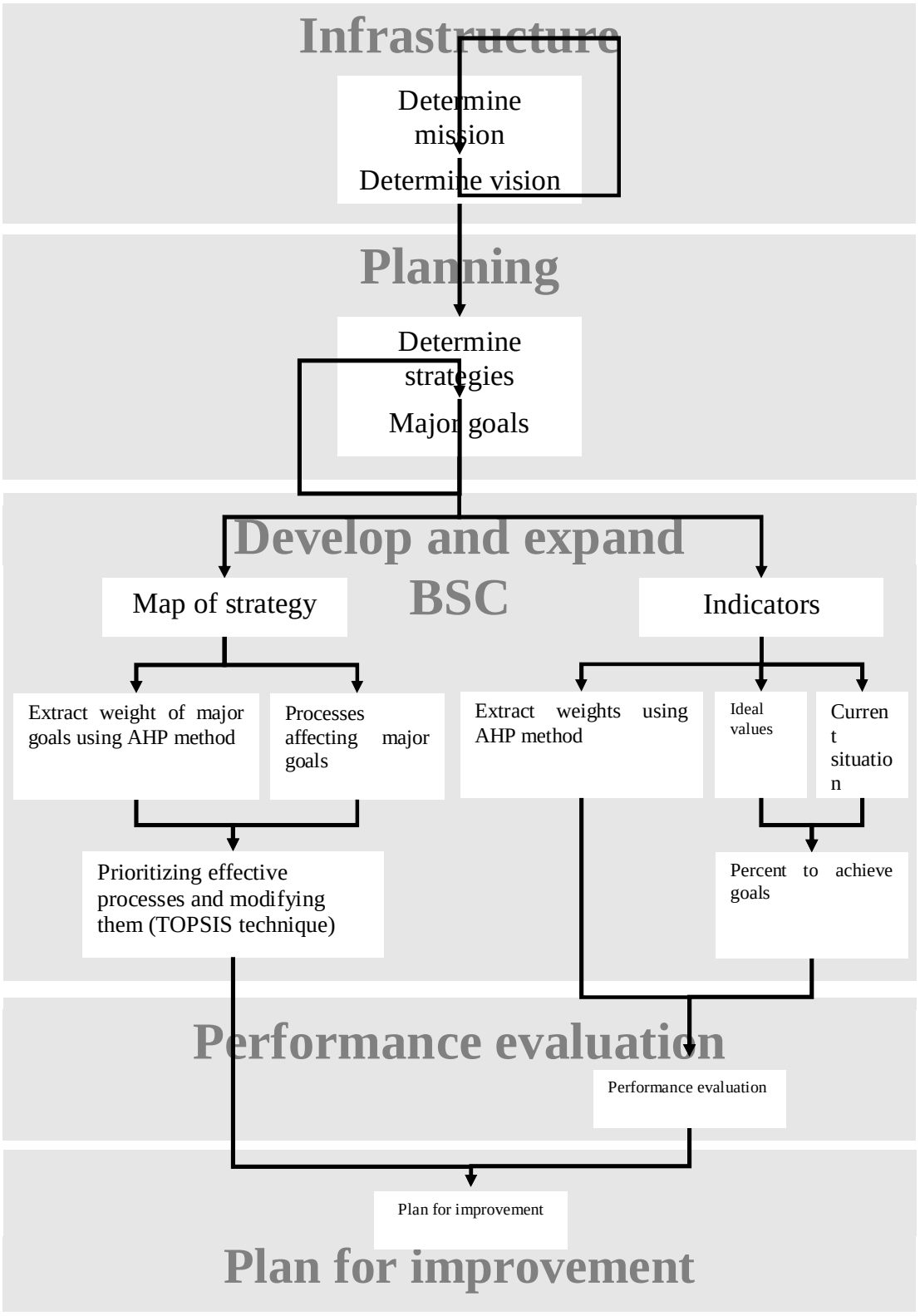

Fig 2. The process of modeling conceptual model in research population

Table 2. Major goals at Semnan Hadid firm

Strategy	Major goals	BSC vision
Increase organizational productivity and flexibility of production processes for effectiveness	Increase productivity production Improve knowledge and increase skills levels Improvement of machinery and equipment Develop a comprehensive system of maintenance and repair of productivity Expand product lines by purchasing multiple technologies produced Improving product quality Customer satisfaction. Reduction of energy consumption Improving mix of revenue (sales)	Perspective of internal processes Learning and growth perspective Perspective of internal processes Perspective of internal processes Perspective of internal processes Customer perspective Customer perspective Financial perspective Financial perspective
Orienting promotion and development of communication networks with customers	Increase productivity in relation to customer to develop networks for Customer complaints and suggestions within and outside the country	Learning and growth perspective Perspective of internal processes
Development of marketing and research in order to expand the domestic and foreign market share	Increasing advertising and brand development company Increase market share	Customer perspective Customer perspective
Improving employee motivation needs to increase product quality and reduce waste	Increasing employee motivation needs	Learning and growth perspective

Table 3. matrix of strategies for Communication and visions of the balanced scorecard

Financial perspective	Customer perspective	Perspective of internal processes	Learning and growth perspective	visions of the balanced scorecard
Reduction of energy consumption Improving mix of revenue (sales)	Improving product quality Customer satisfaction.	Increase productivity production Improvement of machinery and equipment Develop a comprehensive system of maintenance and repair of productivity Expand product lines by purchasing multiple technologies produced	Improve knowledge and increase skills levels	Increase organizational productivity and flexibility of production processes for effectiveness
		develop networks for Customer complaints and suggestions within and outside the country	Increasing productivity in relation to customer	Orienting promotion and development of communication networks with customers

	Increasing advertising and brand development company Increase market share			Development of marketing and research in order to expand the domestic and foreign market share
			Improving employee motivation needs	Improving employee motivation needs to increase product quality and reduce waste

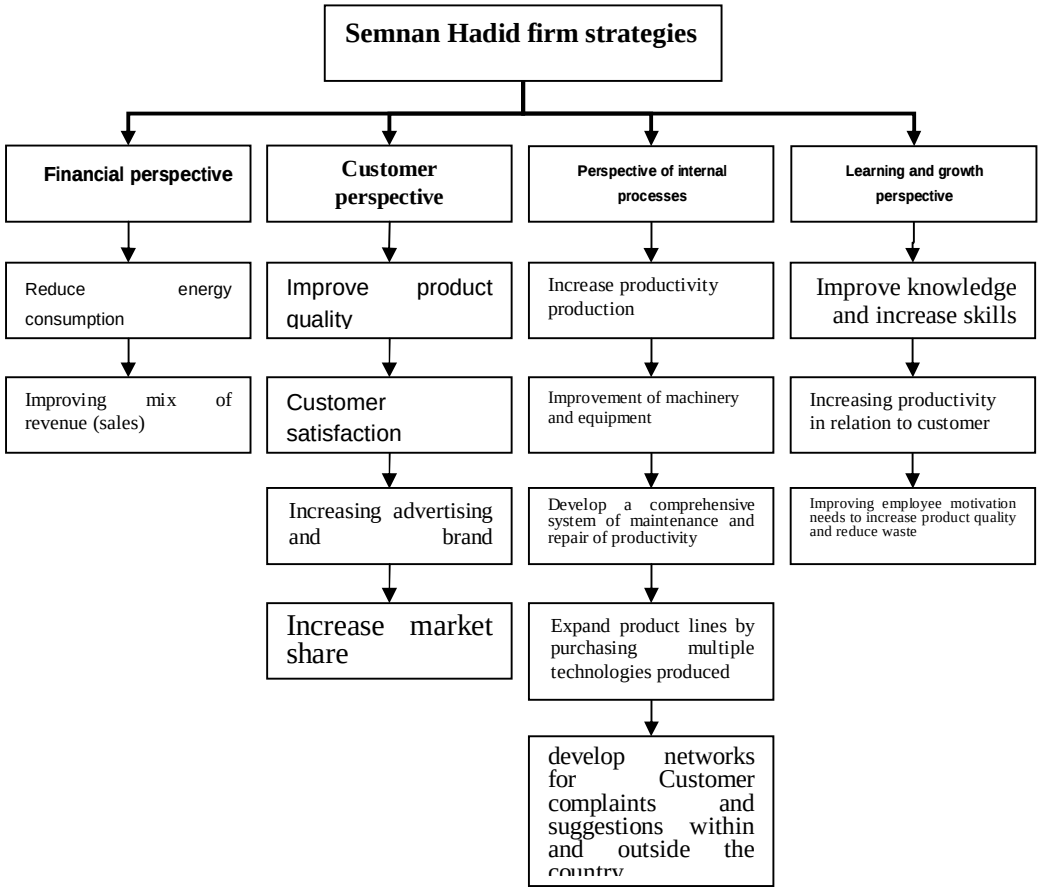

Fig 3. Tree decision diagram for major goals

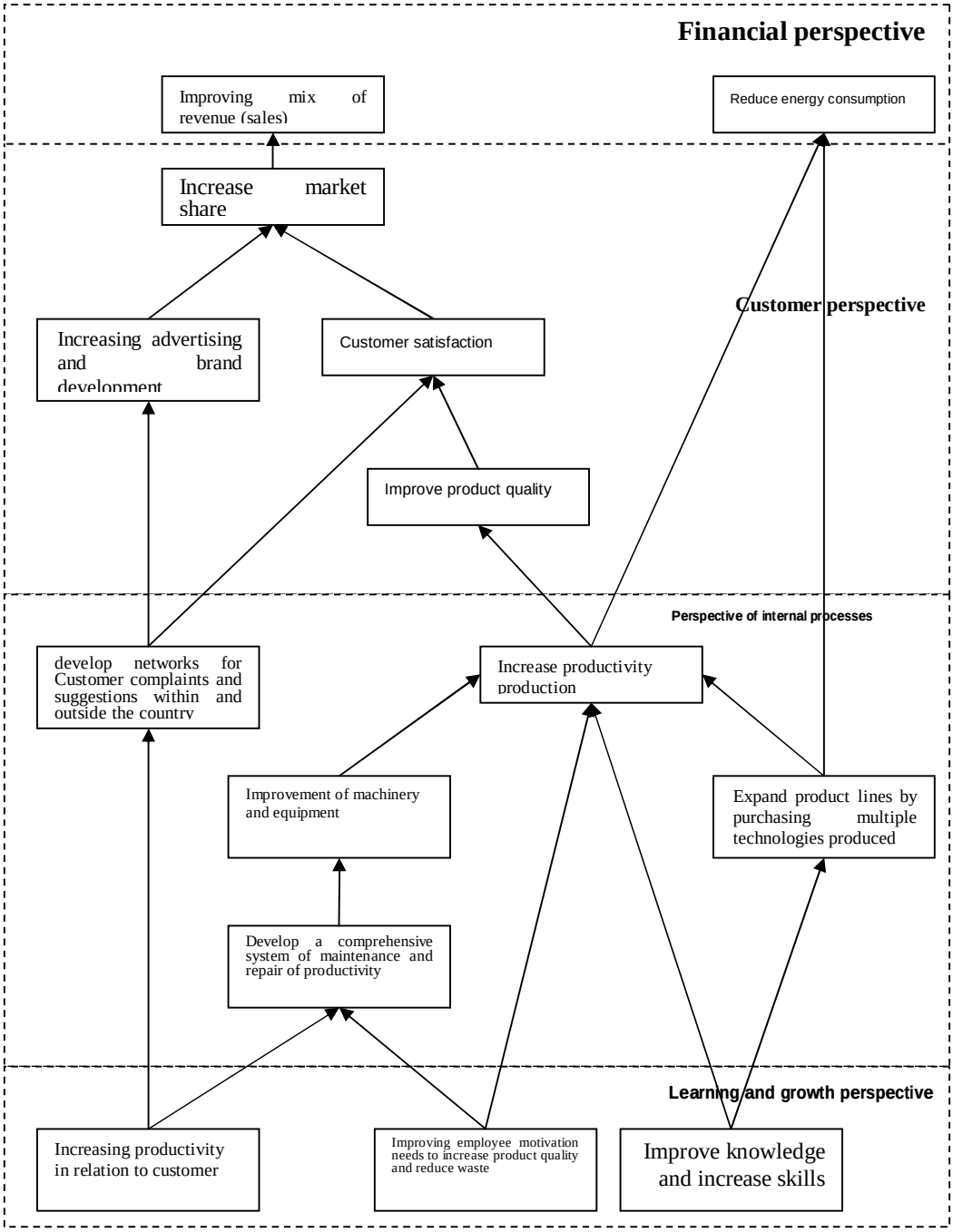

Fig 4. The map of strategy for Hadid Semnan firm

Fig 4. The processes affecting major goals of Semnan Hadid firm

Process	Row	Process	Row
Process of research and development	10	Process of Human Resource Management	1
Customer Relationship Process	11	Financial and accounting processes	2
Supplier evaluation process	12	Infrastructure development	3
Product quality control process	13	Process of measurement, analysis and improvement	4
Sales Process	14	Planning and control of production processes and services	5
Packaging and storage Process	15	Education process	6
Process of control data and records	16	Production Process	7
Process of gathering and analyzing information	17	Maintenance and repair process	8
Industrial engineering Process and system auditing	18	Process of Engineering	9

Table 5. experts' views on the extent to which firm' processes affect strategies

Improve the incentive ...need	Research Development and Marketing	Customer orientation ...promotion	Increase organizational productivity	Strategy Process
Very high	Very low	Very low	Low	Process of Human Resource Management
Very low	Very low	Average	Very low	Financial and accounting Process
Low	Low	Low	Low	Infrastructure development
Very low	Very low	Very low	Average	Process of measurement, analysis and improvement
Very low	Low	Very low	Average	Planning and control of production and services Process
Average	Very low	Very low	Average	Education process
High	Very low	Very low	Very high	Production Process

Very low	Very low	Very low	Very high	Maintenance and repair Process
High	Very low	Very low	Very high	Process of Engineering
Low	Very high	Average	Low	Process of research and development
Very low	Very high	Very high	Very low	Customer Relationship Process
Very low	Very low	Very low	Average	Supplier evaluation process
Very high	Very low	Very low	High	Product quality control process
Very low	High	Average	Very low	Sales Process
Very low	Very low	Very low	Average	Packaging and storage Process
Very low	Average	Low	Very low	Process of control records and data
Very low	Low	Low	Low	Process of gathering and analyzing information
Very low	Very low	Very low	Average	Process of Industrial engineering and system auditing

Table 6. Vicinity coefficient of firm's processes in affecting strategies

Rank	vicinity coefficient	Description Process
7	0.372179422	Process of Human Resource Management
11	0.254212672	Financial and accounting Process
12	0.25	Infrastructure development
15	0.174001644	Process of measurement, analysis and improvement
13	0.212183515	Planning and control of production and services Process
9	0.271306643	Education process
5	0.40506217	Production Process
8	0.301179923	Maintenance and repair Process
5	0.40506217	Process of Engineering
2	0.525008111	Process of research and

		development
1	0.554839841	Customer Relationship Process
15	0.174001644	Supplier evaluation process
3	0.419600458	Product quality control process
4	0.407870189	Sales Process
15	0.174001644	Packaging and storage Process
10	0.268177128	Process of control records and data
14	0.211407902	Process of gathering and analyzing information
15	0.174001644	Industrial engineering Process of and system auditing

Table 7. adjusted processes of the firm in affecting strategies

Rank	vicinity coefficient	Description Process
7	0.37217942	Process of Human Resource Management
5	0.40506217	Production Process
5	0.40506217	Process of Engineering
2	0.52500811	Process of research and development
1	0.55483984	Customer Relationship Process
3	0.41960046	Planning and control of production and services Process
4	0.40787019	Sales Process

Table 8. Semnan Hadid firm's performance indicators

Performance indicator	Major goal
Index of personal value added	Increasing production
Efficiency of technical projects	
Per capita indicators of effective teaching	Improve knowledge and increase skill levels

Capita index suggestions	
Wastes index	Improvement of machinery and equipment
Index of technical stoppages in the production line.	Develop a comprehensive system maintenance for productivity
Costs of overtime and night work	Expand product lines by purchasing multiple technologies produced
Updating index of existing machinery	
Agility index of the organization	
Index of Deviation of the global quality standards	Improve product quality
Back to Sales index	
Internal customer satisfaction index	Customer satisfaction
Customer satisfaction index	
index energy costs	Reduction of energy consumption
index of Power of Sale	Improved mix of revenue (sales)
index of CRM (Customer Relationship)	Increasing efficiency in relation to customer
The expansion index of organization network	develop networks for Customer complaints and suggestions within and outside the country
index of Adoption of a brand in the internal and external communities	Increased advertising and brand development company
index of market share	Increase market share
Index of employees Motivation	Increase employee motivation needs

Table 9. performance evaluation levels of Semnan Hadid firm

Balanced performance evlaution	Effective process	Index				Goal		Vision
		Percent of access to goal	The value of current situation	Ideal value	Name	Weight (FAHP)	Name	
%16.54	Research and development	%48	%48.26	%100	Per capita index of effective teaching	0.68529412	Improve knowledge and increase skills levels	Learning and development
%13.24		%39	%38.65	%100	Per capita index of appropriate recommendations			
%4.28	Customer Relationship	%19	%19.36	%100	Indicators of CRM (Customer (Relationship	0.22132353	Increasing information efficiency in relation to customer	
%1.05	Human Resource Management	%11	%11.26	%100	Index of employees motivation	0.09338235	Increase employee motivation needs	

							%35.12	
%6.57	Production process	%28	%28.23	%100	Indicators of of personal value added	0.4655345	Increase productivity of production	Internal processes
%7.60		%33	%32.65	%100	Efficiency Indicators of technical projects			
%5.55	and engin mical	%43	%43.29	%100	Injuries Indicators	0.25635994	Improvement of machinery and equipment	
%1.31	Technical and engineering	%31	%30.85	%100	Indicators of technical stoppages in the production line	0.08503844	Develop a comprehensive maintenance and productivity system	
%4.67	Production process	%60	%60.37	%100	Costs Indicators of overtime and night work	0.15482756	Expand product lines by purchasing multiple technologies produced	
%6.24		%81	%80.64	%100	Updating Indicators of existing machinery			
%4.87		%63	%62.94	%100	Agility Indicators of organization			
%0.49	Customer relationship	%25	%25.48	%100	The expansion Indicators of organization network	0.03823956	Develop networks to handle customer complaints and suggestions	
%0.58		%30	%30.46	%100	Indicators of client inquiry			
							%37.89	

Table 9. performance evaluation levels at Semnan Hadid firm

Balanced performance evlaution	Effective procces ss	Index				Goal		Vision
		percent of access to goal	Value of current situation	Ideal value	Name	Weight (FAHP)	Name	
%25.62	Control quality of product	%100	%99.50	%100	Index of Deviation of the global quality standards	0.51491381	Improve product quality	Customer
%2.67		%10	%10.38	%100	Back to Sales Indicator			
%8.15	Customer relationship –control quality of product	%58	%57.98	%100	Internal customer satisfaction index	0.28116175	Customer satisfaction	
%7.20		%51	%51.23	%100	external customer satisfaction index			
%1.44	Customer relationship	%21	%20.95	%100	Indicators of Adoption of brand in the internal and external communities	0.13700051	Increase advertising and develop brand	
%0.37	Sale	%11	%11.18	%100	Indicators of of market share	0.06692394	Increase market share	
							%45.45	
%2.50	and engineerin	%81	%80.64	%100	Indicators of energy costs	0.14285714	Reduction of energy consumption	Financial vision
%78.75	Satle	%91	%91.37	%100	Power of Sale Indicator	0.85714286	Improved mix of revenue ((sales	
							%81.25	

Table 10. Recognize the processes required to improve the reasons of deviation

the reasons of deviation	Objectives	Importance grade	Process
The lack of a database of corporate customers Low Cost Advertising and Promotion	Increasing information efficiency in customer relationship Develop Networks meet customer complaints and suggestions Customer Satisfaction Increased advertising and brand development in company	0.55483984	The customer relationship process
Staff's inability to produce the correct transmission Concepts The low Per capita rate for teaching staff	Improve knowledge and Increase the level of skills	0.52500811	Research and developmen t