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Double loop strategy management: implementing BSC as a linkage between strategic development and implementation

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Organizations are required to produce goods and services at a low cost, with high quality and with fast and flexible responsiveness to customer's needs. So it is necessary for the firms to know the situation of things and what strategy can improve it. The aim of this study is to determine optimal strategy. In this study we used BSC, double loop strategy management and SMART technique to determine the optimal strategy. This method is used for the first time in strategy management. By answering two important questions we can achieve the goals of the firm. Findings show that by the proposed method, the market share was increased to 6% and the net revenue of firm was increased to 2 million dollars in the first year.

Key words: Strategy, BSC, SWOT analysis, SMART, printing and packing industry.

INTRODUCTION

Organizations are required to produce goods and services at a low cost, with high quality and with fast and flexible responsiveness to customers' needs (Venkatraman, 1994; Hughes et al., 2006). Successful companies must be able to anticipate changes in operative environments and be able to react faster than their competitors (Kaplan and Norton, 2001).

This puts pressure on organizations to redesign the way in which they conduct their business and build information systems to support new processes (Venkatraman, 1994; Hughes et al., 2006). As all businesses are in competition they must first formulate a competitive strategy. Competitive strategy has been defined as: "positioning a business to maximize the value of the capabilities that distinguish it from its competitors" (McDonald, 1996). The majority of the literature (Keong et al., 1995; Voss, 1995) has focused on the strategy

decision arena that involves a considerable level of qualitative values.

In order to bring such rationality to strategic management it is necessary to first gain a clear understanding of the concept of strategy and subsequently to design and develop a model of the strategy process.

In the early 1990s, Kaplan and Norton developed the BSC approach to compensate their perceived shortcomings of using only financial metrics to judge corporate performance (Kaplan and Norton, 2000). It reflects the four BSC perspectives (customer, business processes, learning, and innovation and financial), long- and short-term objectives, as well as measures between qualitative and quantitative performance (Keyes, 2005).

According to Kaplan and Norton (1996), to present a clear picture of organizational performance, a company needs to concentrate not only on financial performance

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measures but also on non-financial measures. A beneficial side-effect of the use of the BSC is that, when all measures are reported, one can calculate the strength of relations between the various value drivers (Van Der Zee and Jong, 1999). The BSC identifies the information required to measure performance against the business objectives (Kaplan and Norton, 2000). The balanced scorecard performance management tool, although, deficient in empirical testing of its benefits (Nørreklit, 2000), is arguably the dominant framework in performance management (Marr and Schiuma, 2003; Smith, 2005).

If a system such as Strategic Enterprise Management (SEM) (Bringnall and Ballantine, 2004) incorporates the BSC in its database, it can become a powerful executive information system. Chenhall (2005) argues that SPMSs enhance organizational learning which is a means to acquire, interpret, diffuse and store information and outcomes of organizational experiences. Burney et al. (2009) hypothesize and show that the extent to which employees perceive that a SPMS reflects a strategic causal model and the degree to which it is technically valid is positively associated with both, employees' perceptions of organizational justice and performance.

The purpose of this study is to design an optimal strategy by using BSC and Double loop strategy management and seeks to address two questions:

- 1) What strategy is needed for firm to stay in competitiveness environment?
- 2) Which program is more needed to implement this strategy?

This paper is organized in five sections. After the introduction, Section 2 is Literature review. Section 3 introduces the case study. We then in section 4 and 5 discuss empirical results, summarize key findings, and discuss implications.

LITERATURE REVIEW

Changes in competitive environments have increased the importance of strategic Management in corporations. Deregulation in the early 1990s, privatization, market factors, internationalization and supranationality have all changed the business environment (Hughes et al., 2006). The ability to mobilize and exploit intangible or invisible assets has become as decisive as the investment and management of tangible physical assets (Kaplan and Norton, 1996; Barad and Dror, 2008). BSC was developed in the early 1990s by Kaplan and Norton (1992) and has been applied in many industries such as banking (Beechey and Garlick, 1999), healthcare (Stewart and Bestor, 2000), and hotels (Denton and White, 2000)

To date, BSC seems to have been successful and more and more companies are starting to use it. Lillrank (2000) regards BSC as one of the most important inventions in

the field of management in the last decade. BSC facilitates an outline of the strategy and provides a frame for strategy discussions before implementation of the strategy (Kaplan and Norton, 1996, 2001; Hughes et al., 2000; Hughes et al., 1998).

BSC is a conceptual framework that translates an organization's vision and strategies into a set of performance indicators distributed among four perspectives: financial, customer, internal processes, and learning and growth. Each perspective includes strategic issues, goals, and performance indicators. This framework views an organization's performance from four key perspectives, with regard to which organizations should articulate their core vision, Strategy, and goals before translating them into specific initiatives, targets, and measures (Smith, 2007).

The increasing use of BSCs is changing the way top managers run their companies. When envisioning a firm's future development, they no longer focus chiefly on monetary success indicators in the financial area (Rickards, 2007). Instead BSC is designed to complement "financial measures of past performance with their measures of the drivers of future performance" (Bhagwat and Sharma, 2007).

The process aspect and the input aspect of the integrated model are analogous to the internal perspective and the learning-and-growth perspective, respectively, (Kaplan and Norton, 1996, 2001, 2004). It is also possible to develop a "BSC strategy map" on the basis of the integrated model.

The strategic map can transfer the firm's vision and strategies into the four perspectives, and ensure that objectives and measures are understood and accepted by each member of the organization. Development of a performance measurement system includes the vision and strategy, the goals of the different views, critical success factors and the metrics. The critical success factors are knowledge, skills, capabilities, resources, features and activities through which the company prospers (Toivanen, 2001).

The original Kaplan and Norton's perspectives are (Sharif, 2002):

- 1) Customer. How are we perceived by our customers (as of today)?
- 2) Internal business process. What core competencies do we possess and what can be developed (from today)?
- 3) Learning and growth. What is the capacity for the organization to learn and grow (into the future)?
- 4) Financial. What is the impact of performance on shareholder value (in a historical sense)?

When implementing BSC you can actually implement strategy at the same time. BSC can be implemented in many kinds of organizations and every organization has its own special features during the process (Haapasalo et al., 2006).

The lack of alignment of the measurements of the

returns from BSC related activities with the strategy of the company; the difficulties in the employment of some of the traditional financial indicators (Rickards, 2007; Wong-On-Wing et al., 2007); and the lack of consensus in the choice of BSC dimensions to be used for the strategic management of this type of activity (Bhagwat and Sharma, 2007; Donnelly, 2000) make BSC model more useful for companies.

BSC may be considered one of the instruments for the measurement of the returns of this activity, as confirmed from several studies developed in the last decade. BSC has been suggested as a framework for grouping the criteria and measures for evaluating a set of alternatives in various decision settings such as IT investments (Stewart and Mohamed, 2001), R and D projects (Eilat et al., 2008), ERP systems (Cebeci, 2009), and banks (Avkiran and Morita, 2010; Kuo and Chen, 2010). Kerssens-van Drongelen and Cook (1997) have been the first that highlighted the link among the five main output measurements utilized in literature and in practice (namely, cost, quality, time, innovatory capacity and contribution to profits), and the four perspectives of the BSC.

Donnelly (2000) observed that about 40 per cent of new products do not achieve the returns desired, and stressed that this may be due to the inadequacy of the performance measurement techniques usually adopted, that does not fit well with the company's strategy. Li and Dalton (2003) described the implementation of the BSC in the company Pharmacia and introduced a fifth dimension "Learning and innovation". Bremser and Barsky (2004) stressed the inadequacy of the traditional measures for those companies where the cycle of innovations is more important than the cycle of operations.

The same authors highlighted the following benefits that a company may obtain from the use of a BSC (Bigliardi and Ivo Dormio, 2010):

- 1) The simplicity to translate a company's strategy into operational terms;
- 2) The alignment of the organization structure with the strategy;
- 3) The transformation of the strategy into a continual process;
- 4) The implementation of a process for learning and adapting the firm's strategy;
- 5) The creation of a leadership for change in the strategic management system.

Strategic planning assists managers to take decisions, to anticipate changes or even to be prepared for them. Thus, strategic planning should maintain the characteristic of flexibility, allowing the adjustments needed to respond to the uncertainties of the environment (Goncalves, 2009). We must not only measure the tangible assets but which also considers the company's intangibles, thus we must establish relationships among the objectives of the strategic planning and develop the

Table 1. Double loop strategic management, Source: Kaplan and Norton (2000).

Internal viewpoint	External viewpoint
Strengths	Strengths
Match with opportunities	Opportunities
Minimize weaknesses	Avert threats

competences and the actions at the operational level. This is what the BSC does. Since organizations, generally, aim to reach specific objectives, it is important to establish performance indicators and evaluation tools, which might permit the performance expected and obtained to be compared so as to verify the efficiency and effectiveness of the strategies adopted (Wegner and Dahmer, 2004).

SWOT

SWOT was originally introduced in 1969 by Harvard researchers (Learned et al., 1991). SWOT (strengths, weaknesses, opportunities and threats) analysis is a management support tool for the comparison of the internal characteristics against environmental factors of an organization (Table 1) (Munive-Hernandez et al., 2004). Subsequently, during the decade of the 1980s, Porter's (1980) introduction of the industrial organization paradigm with his five forces/diamond models gave primacy to a firm's external environment, overshadowing the popularity of SWOT. It simply involves writing down in a structured grid the main strengths and weaknesses of the organization, alongside its opportunities and threats in the external environment. SWOT analysis has been a popular platform of environmental analysis after Jack Welch tripled General Motor's productivity growth rate (Slocum and McGill, 1994). Wehrich (1982) has further developed the model into a well-structured matrix. SWOT analysis is proposed, to gain more penetrating strategic insights (Valentin, 2001).

Double loop strategic management

Double loop strategic management is an extension to the balanced scorecard (Kaplan and Norton, 2000), in which BSC is a link between strategy development and Implementation, as presented in Figure 1.

SMART

According to Edwards and Barron (1994), the smart is "by far the most common method actually used in real, Decision-guiding multi-attribute utility measurements". The advantage of the smart model is that it is independent of the alternatives. Since the ratings of alternatives

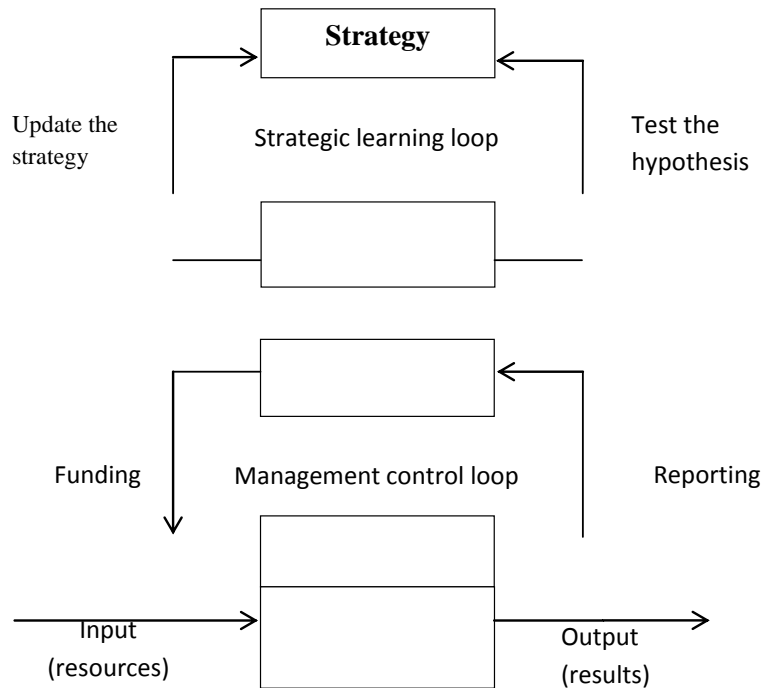


Figure 1. SWOT. Source: Piercy and Giles (1989).

are not relative, changing the number of alternatives considered will not in itself change the decision scores of the original alternatives (Valiris et al., 2005).

Case study

The case study is ASAN printing and packing firm in Qazvin. Printing and packing industry in IRAN is a low capacity industry and every firm could seize a greater share of the market with having appropriate strategy. By the way, locating the factory in Qazvin is an opportunity for ASAN firm. This is because the firm can supply a lot of its needs in low time and has a competitive advantage to other competitors. The market share of ASAN firm in 2009 was 19% and the net revenue of the firm was 1020000 dollars. Senior managers in ASAN firm decided to implement the strategy that makes the ASAN firm a strong competitor and leader in industry.

Data analysis

First of all we constitute an expert team from different parts of ASAN firm. The experience of these people in this industry was over 10 years. According to Fred (2007) we constitute one table of internal strategic factors for weaknesses and strengths (Table 2) and one table of external strategic factors for opportunity and threats (Table 3) that these tables involve the weights which the

expert teams have assigned for those factors. We use the average of experts' opinions and then normalize these weights by importance coefficients that were defined by Fred (2007). From Tables 2 and 3, we can understand how the firm situation in industry is and help us to make a good decision and make a good map for improving the firm and help us to know what changes we must make for improving our firm.

First we give the score between zeros (not important) to one (very important) to these factors that are obtained by average opinion of expert's team. The total of these scores must be one. Then we give the numbers to these factors that are one to four. Giving these numbers to these factors is according to our expert team's opinion. The number one illustrates that the factor has weak performance and the number four specifies that the factor has strong performance. Then we multiply the two columns to each other. The third column is final score of each factor. The sum of these final scores is the overall performance of our internal and external factor evaluating that in general manner is one to four. The average of total final score is 2.5. If the total final score was less than 2.5 the overall performance of internal evaluating factors is weak. If this score be near to one the performance is so weak. If this score be over 2.5 the overall performance of internal evaluating factors is strong and if this score be near to four it is so strong.

The total final score is 2.695 for IFE and it says that the overall performance of our internal factors is not bad but we must improve these and the total score for EFE is

Table 2. Internal strategic factors.

Final score	score	Average of expert opinion	Internal strategic factors	
Strengths				
0.6	4	0.15	Application of high tech production and 75% automation equipment	
0.03	3	0.01	Having update information about suppliers and competitors	
0.015	3	0.005	Implementing 5S and having industrial protection programs	
0.09	3	0.03	Ability to produce the monopoly of fruits cartoons	
0.015	3	0.005	Young human resource	
0.48	4	0.12	Having advance IS for sale department	Internal
0.4	4	0.1	Having the most portion of market	Factors
0.56	4	0.14	locate factory in QAZVIN	Evaluating
Weaknesses (IFE)				
0.04	2	0.02	No definition for processes, structures and indicators for evaluating system	
0.03	1	0.03	Having no industrial accounting and human resource units	
0.04	2	0.02	Incoordination between sales and production department	
0.05	1	0.05	Law cash	
0.16	1	0.16	Having no quality control laboratories	
0.05	1	0.05	Unemployment of definition capacity	
0.01	2	0.005	Using handmade equipment for packing	
0.075	1	0.075	Having no general software for production system	
0.02	2	0.01	Having no system for customer climate (like QFD)	
0.03	2	0.015	Having no general system for evaluating financial department	
2.695		1		Total

Table 3. External strategic factors.

Final score	score	Average of expert opinion	External strategic factors	
Opportunities				
0.6	4	0.15	High consumption of cartoons	
0.32	4	0.08	Possibility for producing letter according to loan's endowment from government to forestry industry	
0.24	3	0.08	Creation printing and packing field in internal universities	
0.4	4	0.1	Potential capacity in agronomy industry for buying cartoons	
0.015	3	0.005	Making culture in people for reusing of letters	
0.32	4	0.08	Possibility for production letter or buying letter from median Asia (expect present suppliers)	
Threats External				
0.04	2	0.02	No existing cartoons world consumption culture in IRAN	Factors
0.08	1	0.08	Existing preventing problems in transportation of letter with 2.8 cm width	Evaluating
0.15	1	0.15	Economicals' Prohibition of IRAN	(EFE)
0.13	1	0.13	Low quality of internal suppliers product (letter)	
0.1	2	0.05	Scarcity of internal suppliers (because of no evaluating criteria and taking the bargaining power)	
0.1	2	0.05	Incorporating competitors and enhancing the bargaining power of them	
0.05	2	0.025	Increasing the price of letter with no reason	
2.545		1		total

Table 4. SWOT matrix.

weakness point	strength point	
No definition for processes, structures and indicators for evaluating system. Having no industrial accounting and human resource units. Incoordination between sales and production department. Law cash. Having no quality control laboratories. Unemployment of definition capacity. Using handmade equipment for packing. Having no system for customer climate (like QFD) Having no general system for evaluating financial department	Application of high tech production and 95% automation equipment. Having update information about suppliers and competitors. Implementing 5S and having industrial protection programs. Ability to produce the monopoly of fruits cartoons. Young human resource. Having advance IS for sales department. Most capture market share Locate factory in QAZVIN.	SWOT of ASAN printing and packing industries
S6: Hiring educated human resource. S7: purchase letters from companies in central Asia S8: Creating internal LC by customer for solving problems.	S1: Focus on potential markets S2: Focus on international fruit Markets. S3: Creating online sales system. S4: Producing paper factory S5: Training human resource by educated people in this field.	opportunity
S11: cash sales policy. S12: assistance from organization standard for evaluating supplier.	S9: Try to solve transporting paper problems with 2.8 widths. S10: Developing human resource for more competition.	Treatment

2.545 and it says that our external factors is not bad but like IFE we must improve these factors. So according to IFE matrix and EFE matrix we have an overall view about our firm in industry.

Now we can constitute the SWOT matrix and define the firm strategies (Table 4).

We define 12 strategies: Three strategies for WO, five

strategies for SO, two strategies for WT and two strategies for ST.

Now according to the first loop of double loop strategy management, we connected firm strategies to BSC that these strategies were considered in SWOT matrix. We make Table 5 that assigns the strategies to BSC.

We then weighted the BSC's perspectives by SMART

Table 5. Assign the strategies to four perspectives of BSC.

Strategic assignment to BSC's perspective	Perspective
S7: Buying letter from other median Asian's companies. S8: Creating internal LC by customer for solving problems.	Financial
S3: Creating online sales system. S11: Politics of cash sale.	Customer
S1: Focus on potential markets S2: Focus on international fruit Markets. S4: Producing paper factory S9: Try to solve transporting paper problems with 2.8 widths. S12: Having standard company for evaluating supplier.	Internal processes
S5: Training human resource by educated people in this field. S6: Hiring educated human resource. S10: Developing human resource for more competition.	Learning and growth

Table 6. Importance of scores and perspectives weight.

Causal relationship between four BSC perspectives	weight
Financial	0.0626
Customer	0.1458
Internal processes	0.2708
Learning and growth	0.5208
Total	1

technique and ranked the strategies. We multiply the weight of each perspective to average opinion of our expert team (showing that how important is every strategy according to each perspective of BSC). According to studies about strategy and our expert team's opinion the importance of four perspectives is like this:

Learning and growth perspective is preferred to internal processes perspective, internal processes perspective is preferred to customer perspective and customer perspective is preferred to financial perspective.

$$\begin{aligned}
 \text{learning and growth } w1 &= \frac{(1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4})}{4} = 0.5208 \\
 \text{internal process } w2 &= \frac{(\frac{1}{2} + \frac{1}{3} + \frac{1}{4})}{4} = 0.2708 \\
 \text{customer } w3 &= \frac{(\frac{1}{3} + \frac{1}{4})}{4} = 0.1458 \\
 \text{financial } w4 &= \frac{1/4}{4} = 0.0626
 \end{aligned}$$

Then we normalized the weight of strategies and getting the priority of them (Tables 6 and 7).

In this step we multiply the strategy level weight to average weighted of experts team and calculate the priority of each strategy.

The findings in this step show us that three strategies (S5, S6 and S10) that are related to learning and growth perspective have the most effect on our firm situation.

Now according to second loop of double loop strategic management we link our programs and initiatives to BSC. For this step first we determined four indicators to measure the strategy output.

The findings in this step show us that market share indicator have the most effect on our planning for reaching to firm's goals. The strategies for doing this are S1, S2, S3, S4, S7, S8, and S10. Besides these strategies we implement strategies 5 and 6 to have complementary program for the firm. So according to Tables 8 and 9, strategies are implemented. 7 strategies are the most important strategies and 2 strategies have complementary effect on these strategies. So we have 7 MSPs. The MSPs that we must do were following this:

1. Focus on potential markets
2. Focus on international fruit Markets.
3. Creating online sales system.

Table 7. The normalized scores according to four perspectives of BSC and priorities of strategies.

Priority	Strategy		Priorities		Strategy	Strategy level
	Weighted points	Strategy level weight	Average weight of experts opinion			
11	0.0266	0.0626	0.425		S7	Financial
9	0.0360	0.0626	0.575		S8	
6	0.0693	0.1458	0.475		S3	Customer
4	0.0765	0.1458	0.525		S11	
5	0.0745	0.2708	0.275		S1	Internal processes
7	0.0474	0.2708	0.175		S2	
12	0.0203	0.2708	0.075		S4	
10	0.0339	0.2708	0.125		S9	
8	0.0406	0.2708	0.150		S12	
3	0.1432	0.5208	0.275		S5	Learning and growth
1	0.2083	0.5208	0.4		S6	
2	0.1693	0.5208	0.325		S10	

Table 8. The final scores and priorities of strategies according to indicators.

Table prioritized indicators					
Priorities	Weighted index points effect on the strategy	Strategy weight	Effect on the index strategy (according to experts opinion)	Strategy	Indicator
Priority 3	0.0149	0.0745	0.2	S1	Sales
	0.0095	0.0474	0.2	S2	
	0.0173	0.0693	0.25	S3	
	0.0230	0.0765	0.35	S11	
	0.0674	Importance of rate of sales indicator			
Priority 2	0.0186	0.0745	0.25	S1	Profit
	0.0104	0.0474	0.22	S2	
	0.0173	0.0693	0.25	S3	
	0.0214	0.0765	0.28	S11	
	0.0677	Importance of rate of profit indicator			
Priority 4	0.0215	0.1432	0.15	S5	Cost
	0.0250	0.2083	0.12	S6	
	0.0032	0.0266	0.12	S7	
	0.0054	0.0360	0.15	S8	
	0.0068	0.0339	0.2	S9	
	0.0045	0.0406	0.11	S12	
	0.0664	Importance of rate of cost indicator			
Priority 1	0.0164	0.0745	0.22	S1	Market share
	0.0081	0.0474	0.17	S2	
	0.0083	0.0693	0.12	S3	
	0.0010	0.0203	0.05	S4	
	0.0019	0.0266	0.07	S7	
	0.0047	0.0360	0.13	S8	
	0.0406	0.1693	0.24	S10	
	0.0810	Importance of rate of market share indicator			

Table 9. Normalized market share indicator.

Normalized index, the market share table			
Normalized weight	Weighted index points effect on the strategy	Strategy	
0.2025	0.0164	S1	
0.1	0.0081	S2	
0.1025	0.0083	S3	
0.012	0.0010	S4	
0.0235	0.0019	S7	
0.0580	0.0047	S8	
0.5025	0.0406	S10	
1	0.0810	Total	

Table 10. BSC for market share indicator (2011).

Current status (25%) 2011	BSC for market share indicator 2011		
	Past situation (19%) 2009 and 2010	Normalized weight	Strategy
Programs related to implementation strategies	Strategy in achieving the target share		
MSP1	5.0625	0.2025	S1
MSP2	2.5	0.1000	S2
MSP3	2.5625	0.1025	S3
MSP4	0.3075	0.012	S4
MSP5	0.5875	0.0235	S7
MSP6	1.45	0.0580	S8
MSP7	12.5625	0.5025	S10
	25%	1	Total

Table 11. The goals of ASAN firm for 5 years.

2016	2015	2014	2013	2012	2011	Evaluation unit	ASAN	VISION
55%	49%	43%	37%	31%	25%	%	Markets victory	Strategy purpose
20,000	18,000	16,000	14,000	12,720	11,000	\$(1000)	sales	
0.5	0.5	0.5	0.5	0.53	0.55	m ² (\$)	price	
46%	40%	33%	26%	24.5%	18.2%	%	Revenue	
9,200	7,200	5,440	3,640	3,120	2,000	\$(1000)		
10,800	10,800	10,560	10,360	9,600	9,000	\$(1000)	Cost	indicators
54%	60%	66%	74%	75.5%	81.8%	%		
55%	49%	43%	37%	31%	25%	%	Market share	
0.27	0.3	0.33	0.37	0.4	0.45	\$	cost of goods sold per unit	computes
40,000	36,000	32,000	28,000	24,000	20,000	m ² (1000)	sales	

4. Producing paper factory
5. Buying letter from other median Asian's companies.
6. Creating internal LC by customer forsolving problems.
7. Developing human resource for more competition.

Complementary programs:

1. Training human resource by educated people in this field
2. Hiring educated human resource.

After doing the strategies that were determined for the firm the results for first year were so considerable for firm. The market share indicator shows that the market share of firm was increased to 6% and the net revenue of firm was increased to 2 million dollars.

We constitute the normalized index for market share indicator to obtain BSC for this indicator.

Table 10 shows the effect of strategies that are related to market share indicator on our firm.

By these results we constitute Table 11 for the goals of

Table 12. BSC for market share indicator (2012).

BSC for market share indicator 2012				
Objective Status (31%) 2012	Current situation (25%) 2011	Normalized weight	strategy	
Programs related to implementation strategies	Strategy in achieving the target share			
MSP1	6.28	0.2025	S1	
MSP2	3.10	0.1000	S2	
MSP3	3.18	0.1025	S3	
MSP4	0.38	0.012	S4	
MSP5	0.73	0.0235	S7	
MSP6	1.80	0.0580	S8	
MSP7	15.58	0.5025	S10	
	31%	1	Total	

Table 13. BSC table for all indicators.

Goal indicator for 2012	Weighted Index Points Effect on the strategy	Indicators	Rhythmic weight Strategy	BSC perspective	Strategy
12,720,000\$	0.0149	Sales(income)			
3,120,000\$	0.0186	revenue	0.0745	Internal processes	S1
31%	0.0164	Market share			
12,720,000\$	0.0095	Sales(income)			
3,120,000\$	0.0104	revenue	0.0474	Internal processes	S2
31%	0.0081	Market share			
12,720,000\$	0.0173	Sales(income)			
3,120,000\$	0.0173	revenue	0.0693	customer	S3
31%	0.0083	Market share			
31%	0.0010	Market share	0.0203	Internal processes	S4
9,600,000\$	0.0215	cost	0.1432	Learning and growth	S5
9,600,000\$	0.0250	Cost	0.2083	Learning and growth	S6
9,600,000\$	0.0032	Cost	0.0266	financial	S7
31%	0.0019	Market share			
9,600,000\$	0.0054	Cost	0.0360	financial	S8
31%	0.0047	Market share			
9,600,000\$	0.0068	Cost	0.0339	Internal processes	S9
31%	0.0406	Market share	0.1693	Learning and growth	S10
12,720,000\$	0.0230	Sales(income)	0.0765	customer	S11
3,120,000\$	0.0214	revenue			
9,600,000\$	0.0045	Cost	0.0406	Internal processes	S12

ASAN firm to have a wide view of future for 5 years. So our program for next year must be done by this method.

According to results that were obtained by BSC for market share indicator we constitute a BSC table for all indicators that are linked to BSC perspectives (Tables 12 and 13).

Conclusion

We begin our study in 2009 and after a comprehensive

study we start implementing the strategies and programs in 2010. We implement our strategies according to results obtained by BSC and test our program according to double loop strategy management. By this work we know which strategies are in first priorities and which are more needed to notified. When we start our program the market share of ASAN Company was 19%, but in 2011 the market share of ASAN firm became 25%. So by these program we could promote 6% of market share and the revenue of company was increased to 2000000 \$ and it was a good victory for ASAN company. This method was

used for the first time in strategy management and other company in several industries can implement this method to gain competitive advantage. For future study it can be done by linking BSC to BPM not for a tool to measure the outcome but as a basic beginning for an incremental change for company.

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