

IMPROVING ORGANIZATIONAL PERFORMANCE ALONG WITH STRATEGIC PLANNING IN THE FRAMEWORK OF COMBINING THE DAVID MODEL AND BSC ASSESSMENT MODEL

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Abstract

The role of balanced scorecard in strategic planning is to create a link between the organization's strategy and executive actions in a chain of cause-and-effect relationships. In this way, the results of strategic planning are not suspended and are linked in a clear and transparent way to the action. Balanced Scorecard forms strategic issues and determines the measures of goals realization and actions, and thus, operationalizes the organizational strategy. The purpose of this paper is to promote organizational performance along with strategic planning within the framework of combining the David model and BSC model. The statistical population of this research is the employees and customers of one of the largest airline companies in Iran. The simple random sampling was used for sampling from customers and random method of classification according to Cochran formula was utilized for sampling among employees. Its validity was confirmed by content validity and its reliability was calculated by computing Cronbach's alpha. The results of this study showed that the combination of these two models significantly improves the organizational performance, customer satisfaction, and David's model weaknesses in the targeted population.

Keywords: Strategic Planning, assessment, David's Model, Balanced Scorecard, Airline Company

Introduction

Excellence organizations implement their missions and prospect through formulating a strategy focused on the benefit of the organization's stakeholders in their related industry or sector. Strategies, plans, long-term goals and processes are developed in such a way that leads to realize strategies. Strategic planning models are used to implement strategies. David's planning model is one of the planning models used by large companies. This planning model has weaknesses in implementation, evaluation and control, which results in reduced performance. So, in order to complement and improve the strategic planning model of David and resolve its weakness in implementation, assessment and control, as well as aligning the vision-mission and the organization's strategies, we require a model to evaluate the organization's performance. One of the organizational performance evaluation systems is the balanced scorecard. The balanced scorecard model is a tool for strategic management. Facing various phenomena such as the

organization's movements, the market position, being empowered against competitors, identifying improvement methods, and combining them and how to treat each one in the form of strategic management concepts can be understood and followed. Therefore, the main priority of the management actions is the preparation and evaluation of strategy and evaluating it. The actions priority is as follows: 1. the need for perspectives and how to guide the business. 2. The need to pay attention to harmony and coordination (Strickland Mutanson, 1982).

Research thematic literature

The strategic management is a term used to describe the decision-making process. Strategic management is the flow of decisions and activities that lead to one or more effective strategies for achieving goals (Ali Ahmadi, 2003).

Strategic planning: Strategic planning in different organizations is carried out in different ways strategic planning is one of its styles. The strategic planning process provides an outlook and analysis of the company and its environment; explains the current conditions of the company and identifies the effective key factors for its success (Fry& stoner, 1995).

The benefits of Strategic Management: Strategic management allows the organization to act in a creative and innovative manner and not passively shaping its future. This management mode will make the organization to act initiatively and shape its activities in a proactive way (rather than only respond to actions) and thereby, shape its fate and control the future. Small business owners, executives, directors, and for profit and nonprofit organizations' managers have been aware of the benefits of strategic management and have embraced such a reality. Historically, the main benefit of strategic management has been to help the organization choose the most appropriate, more rational way of strategic planning, and thus develop better strategies. There is no doubt that this is one of the main interests of strategic management, but the result of current research shows that this process (and not decisions or documents) can play a more important role in strategic management. Communication is the key to strategic success. Managers and employees are committed to support the organization by engaging in this process (David, 1997).

Strategic planning is a process that most successful and well-known companies use to steer their programs and activities with a long-term vision for achieving goals and realizing their mission; this type of planning, that is often used by large organizations, if properly designed, will lead to the selection of strategies that, if implemented correctly and on time, brings the organization's excellence and success to its intended goals and objectives. Strategic planning identifies the organization's external and internal environments, opportunities and threats and the strengths and weaknesses of the organization, and, with regard to the mission of the organization, sets the long-term goals for the organization and, to achieve these goals, among the strategic choices, it chooses strategies that rely on strengths, eliminates weaknesses and avoids threats, and in case of successful implementation, the organization succeeds in the field of competition. To put it simply, a strategic plan can improve performance because members of the organization may be confused with constant tasks and daily challenges, and lose the goals of the organization. Strategic planning is a powerful tool designed to help organizations to adapt themselves to changing environment. In particular, the strategic planning process provides an attitude and analysis of

the company and its environment; explains the current situation of the company and identifies the key factors affecting its success (Fry & stoner, 1995). Strategic planning can improve performance. A successful plan that ends up with implementation, creates a common value-based vision and is a collaborative process where employees and managers feel shared ownership to it; it accepts responsibility towards society, it is sensitive to and focused on the external environment of the organization, and is designed based on high-quality data, and is the key to effective management (Parnell, 1996).

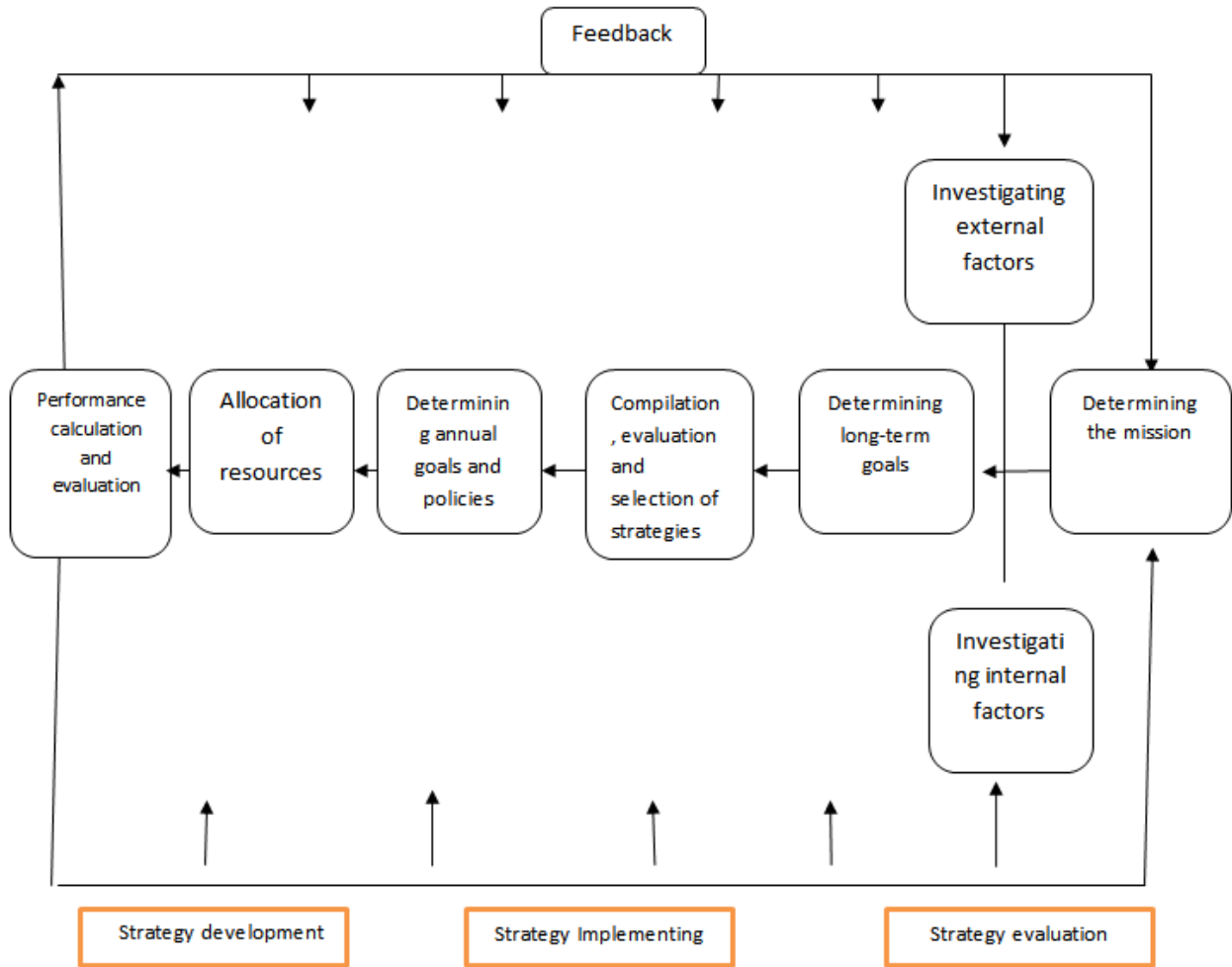
David's Strategic Planning Model

Mission Formulation - Definition of Organizational Values - prospect formation- Exploration of External Factors and Extracting Opportunities and Environmental Threats - Investigating Internal Factors and determining Internal Strengths and Weaknesses - Determining Long-Term Objectives - Formulating Assessment and selection of strategies - Determining annual goals and policies - Allocation of resources - Calculating and evaluating performance; this is David's strategic planning model. Based on this model, strategic management consists of three main parts of the strategy development, implementation and evaluation, which are closely related (David, 1999).

In David's model, a framework named the comprehensive framework of strategy development is used to formulate a strategy. This framework will help strategists to identify and evaluate strategies (Aarabi, Aghazadeh et al., 2006)

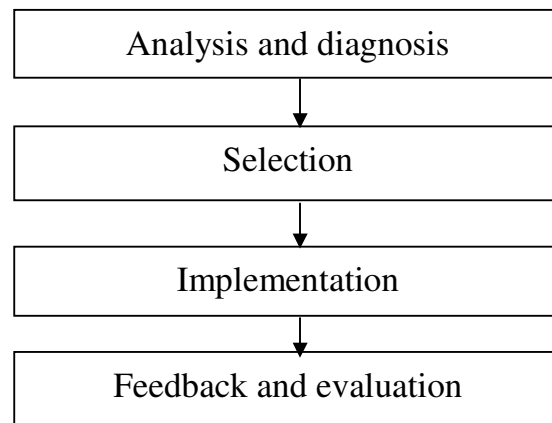
Start step	
Determine the mission and prepare the mission statement of the organization	
Input stage	
External factors evaluation matrix	internal factors evaluation matrix
Comparison step	
Internal and external matrix	SWOT matrix
Decision making stage	
the quantitative strategic planning matrix	

Comprehensive Framework for Strategy Formulation (Source: Arabi et al., 2006)



The Comprehensive Strategic Management framework of David's Model, (Source: David, 1997)

Strategy formulation: A three-stage decision-making framework that includes identifying, evaluating and selecting strategies that help strategists. 1. Input stage (external factor evaluation matrix and CPM matrix and IFE evaluation matrix. The second stage of the comparison, which includes the SWOT, SPACE, BCG, EFE matrices and the main strategy matrix), and the decision stage including the QSPM matrix (Ibid, 1997). All strategic planning and management models are carried out in four phases:



Strategic Planning Model (Source: Fegghi Farahmand, 2005)

Strategic Planning Features

These features include introversion, extraversion, task integration, key people participation, using analytic-creativity techniques in planning and focus on control (Parnell, 1996).

A strategic planning can improve performance and a successful plan is a plan that ends in action, creates a common vision based on values, a collaborative process that employees and managers feel shared ownership about it, accepts responsibility towards community, is sensitive to the external environment of the organization and focuses on it; it is projected on the basis of high-quality data and an important key to effective management (Ibid, 1996).

Strategic planning constraints

Costs, time, expert human resources, lack of access to information, lack of flexibility and stability

- Benefits of implementing strategic planning in an organization

- Before any potential problems arise, reports about the occurrence.
- Help managers become interested in the organization.
- Specify changes and provide conditions for response to changes.
- Determines any need that is necessary to redefine the organization.
- Creates a suitable platform for achieving predetermined goals.
- Helps managers gain a clearer understanding of the organization.
- Facilitates recognition of future environmental opportunities.
- Provides a targeted vision of management issues.
- Provides a platform for monitoring the implementation of program and control activities.
- Helps managers make key decisions in line with their goals.
- Effectively allocates time and resources to designated opportunities.
- creates coordination in the implementation of the tactics that will bring the program to the end.
- Minimizes the time and resources that need to be corrected for incorrect decisions without long-term vision.
- Creates a model for internal communication between employees.
- Arranges priorities in time schedule.

- Provides a basis for determining the responsibility of individuals and thereby increases their motivation.
- Encourages prospective thinking.
- creates motivation in organization's members to have a coherent, integrated approach with the enthusiasm to address issues and opportunities (www.emodiran.com, 2012).

Performance assessment process

In the process of performance assessment, any selected model chosen is required to pass the steps and observance of the order and sequence of the following activities:

- 1-Formulate indicators, dimensions and related axes and determine their unit of measurement
2. Determination of the weight of the indicators, depending on their importance and the relevant rating
3. Standardization and determination of the desired status of each indicator
4. Measurement by comparing the actual performance at the end of the evaluation period with predefined desirable standards.
5. Extraction and analysis of results (Rokninejad, 2008).

The scorecard method as a performance assessment system

Most organizations cannot implement their strategies, and less than 10% of the strategies that have been formulated efficiently, have been successfully implemented in practice. Why do organizations fail to implement their strategies?

1. You cannot manage what you cannot describe, there is no common way to describe and develop business strategies.
2. They do not manage their strategies; they do not understand 95% of the strategy's workforce. 60% of organizations do not connect their budgets to strategy. 85% of senior executives spend less than an hour in a month discussing strategy. Only 25% of the managers find their interests linked to the strategy (Bakhtiari, 2008).

The BSC is recognized as a performance appraisal tool and a practical tool for strategy and also a structure for determining the alignment of the organization, the organization's capital and information. Today, the BSC is referred as a comprehensive framework for organizational change. The components of the scorecard include strategic maps, indicators, measurements, and the cause-and-effect relationship, and the strategic goals of the organization; these elements are introduced for the purpose of differentiating the goals among the four perspectives outlined below and describing the types of performance indicators (ibid., P. , 2008).

Definition of Scorecard:

Kaplan and Norton have presented a new managerial perspective that can turn the strategy into operational terms and thus causes growing. This is the prelude to a comprehensive and enforceable theory.

In fact, this description hardly explains the concept. Kaplan and Norton say:

- The scorecard converts the mission and strategy of the organization into a comprehensive benchmark for comprehensive performance assessment and provides a framework for strategic management and evaluation (Hevers, 1998).
- The Balanced Scorecard is a conceptual framework that turns the organization's major goals to

measurable and distributable indicators among the vital areas of financial, customer, internal processes and growth and learning (Alvani and Seyed Naghavi, 2003).

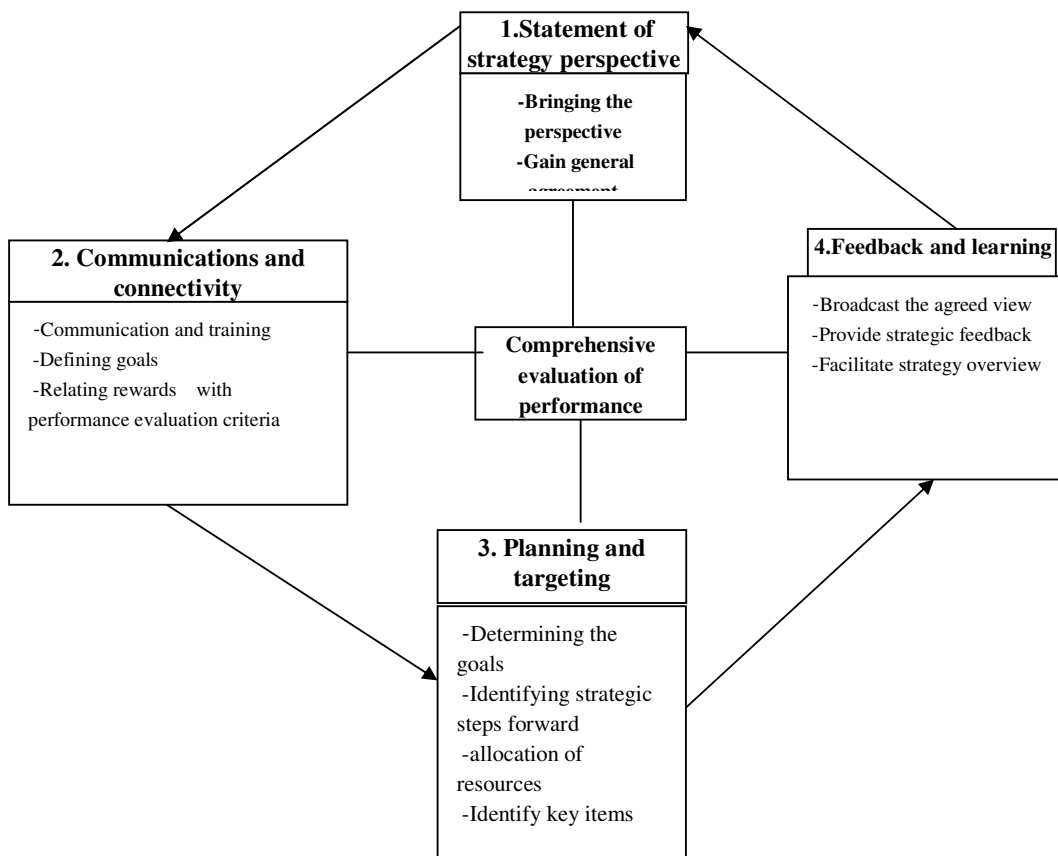
- A Balanced Scorecard is a tool that translates the goals and strategy outlined in the strategy map into a full set of objectives and operational programs, and thus, provides a framework for the strategy monitoring and evaluation system of (Aria, 2002).

Balanced Scorecard as a Strategic Management System

For many organizations, the scorecard has been changed from an assessment tool to what Caplan and Norton called as "strategic management system". Although the main objective of the Balanced Scorecard system is to create equilibrium between the historical financial figures and the drivers of future value creation, gradually, as more organizations experienced this concept, it became a vital tool in aligning their short-term actions with the organization's strategy. In this application, the Balanced Scorecard method addresses many of the obstacles and problems, as mentioned below, involved in implementing effective strategy.

1. Eliminating barrier related to the landscape through strategy translation.
2. The elimination of human barrier through the passage of evaluation criteria.
3. Eliminating resource allocation barriers through strategy resources allocation (Bakhtiari et al., 2010).

In this view, a scorecard is known as a tool for strategy development. According to the mentioned viewpoint:



Strategic Processes in the Comprehensive Performance Assessment System (Bakhtiari et al., 2010)

In the process of developing a strategy, various stages such as the definition of mission, long-term goals, operational objectives, and other requirements must be fully observed. The aid that the Balanced Scorecard provide to the strategy development process is that it leads it and helps strategy designer to better decide on what goals and in what areas and how should be defined. In this view, the Balanced Scorecard is considered as a means to determine the vision, mission, and objectives of the organization in the fourfold areas; areas that have been cleared through the Scorecard. The researcher believes that the great advantage of this strategy formulation method is that when controlling strategy, a scorecard can be used for evaluation, and since the strategy itself is based on the attitude of the scorecard, naturally, evaluation is also much easier (Ebrahimi Sarv Oliya, 2004).

Integration of David's Model and Balanced Scorecard

David's model main difference with the Balanced Scorecard is in the run-up stage. At this stage, all organizational units, processes, and, in general, the whole of our organization are aligned with the developed strategies and the integrity of the organization arises that other models lack this ability. In the feedback and evaluation phase, in BSC model, the two groups of indicators are defined for the evaluation and control of the performance of the strategies, which include the lag and lead indices. The numerical value of these indices is totally dependent on them, therefore, their targeting is based on the importance of the index and the effect of other indexes, and thus the change of an index causes the change of other indicators that these changes are under the control of the managers of the organization (Bakhtiari, 2009).

Methodology:

At first, extensive studies were conducted around the strategic management and concept of David's model, strategic planning and BSC, that introduction to concepts and their application in organizations, and then the focus of studies was on reviewing these concepts and comparing them. The BSC was evaluated as a performance assessment system. David's model was also studied, and with the integration of the BSC with this model, the implementation and evaluation phase of this model were strengthened. These evaluations and implementation of the hybrid model of BSC and David was conducted as a case study in an Iranian airline company. According to what was said earlier, this research is based on the purpose of scientific research of the applied type and is a descriptive-survey research in terms of collecting data. In terms of collecting data, the nature of the research is descriptive and on the other hand, since it is based on providing questionnaires for the experts, the research has a survey aspect. The statistical population and sample is the staff of a large Iranian airline. In this research, the raw data obtained from the questionnaires have been entered into the SPSS Version 18 and the collect data was analyzed. Firstly, using descriptive statistics, the demographic characteristics of sample members in the research including age, gender, educational level, and work experience were described and summarized and then, the inferential statistics were used. T-student and ANOVA have been used in order to study the effects of gender variable and the effects of graduation, work experience and respondents' age, respectively. Data gathering was done using a questionnaire as field and library method. In this research, content validity was verified based on the opinions of the supervisors, advisers, and experts. Customer sampling was based on the simple random sampling and employee sampling was done randomly. Reliability of this research is calculated by Cronbach's alpha coefficient, which is usually evaluated higher than 0. 7

Customers' Reliability

In the customers' section, according to the results, using the Cronbach's alpha coefficient, a reliability of 0.76 is obtained, and since it is higher than 0. 7, then, it has an acceptable reliability.

Reliability statistics	
Cronbach's Alpha	N of Items
. 746	20

Customer reliability

Employee reliability:

According to the results, using the Cronbach's alpha coefficient, the reliability of 0.899 is obtained, and since it is higher than 0. 7, therefore, it has an acceptable reliability.

Reliability statistics	
Cronbach's Alpha	N of Items
. 899	22

Employee reliability

Data analysis structure:

The structure of data analysis was presented according to the questionnaire, which has a questionnaire consisting of 26 questionnaires and employee questionnaire including 23 questions.

The staff questionnaire, according to the Cochran formula, was to be provided to 352 people that for more confidence, it was amounted to 388 people; so, about 390 questionnaires were sent to the staff, that 380 were returned. According to the conditions set out in the questionnaire, the employee's work and service experience should be more than 5 years, because BSC has been implemented in this organization from 2008 to 2013. Most likely, employees who have been over 5 years of experience are included in the sample.

The customers' questionnaire was provided manually and electronically to 400 customers (384 questionnaires should be answered using Morgan's table and Cochran's questionnaire) and 352 were returned.

The analysis has been conducted using descriptive statistics and exploratory factor analysis. The statistical population of this research is one of the Iranian airline companies. After collecting 2 groups of questionnaires, 380 employees were surveyed who had been under 5 years of work experience, which in total, 367 questionnaires were acceptable and the data analysis was conducted using these questionnaires. Among the customers' questionnaires also 352 questionnaires were analyzed and the analyses were conducted in two descriptive and inferential analysis. In descriptive analysis, the frequency and the percentage of demographic variables have been investigated and in the inferential analysis, Single sample t test, paired comparison t-test and analysis of variance and Friedman test were used. The analysis of the status quo and the research questions showed that all questions had average higher than the test value and it could be said that the items examined in this sample were above the average and were in a good condition. In the following, the results of this research are presented along with the analysis of the data on the data and the research questions and according to research questions, the results of this research are presented.

1. In order to investigate the enhancement of organizational performance, firstly by integrating the questions of the questionnaire, we defined an indicator as the question of "whether the combination of David's model with BSC is effective in improving the performance of the organization", and then, the average equality test was used in the SPSS software for the above test.

In the staff questionnaire, in order to increase the organization's performance, we first defined the index as the above question by integrating the questionnaire questions. Then, we used the average equality test in SPSS software for the above test. We performed the above test at 95% confidence level and the results were as follows: significant coefficient = 0.000 and degrees of freedom of = 339 and $t = 62.328$ and average = 3

The value of Sig is less than 5%, which means that H_0 is rejected and the claim is accepted and with the 95% degree of confidence we can assert that: the importance of the above question is greater than the test value (3), and we conclude that from the employees point of view, the combination of David's model with BSC improves the performance of the organization.

2. In the staff questionnaire, in order to improve the effectiveness of strategy implementation in the organization, firstly by integrating the questions of the questionnaire, we defined an indicator as questioning "whether the combination of the David model with BSC would improve the organization's effectiveness", and then, the average equality test was use in SPSS software. We

conducted the test at 95% confidence level, and the following results are obtained: a significant coefficient of 0.000 and a degree of freedom = 339 and $t = 78.844$, and an average of = 3. As it is clear, Sig value is less than 5% and this means that H_0 is rejected and the claim is accepted and with 95% of confidence it can be claimed that: the importance of the above question is higher than test value (3) and we can conclude that from the employees' point of view, the combination of David's model with BSC improves the effectiveness of implementing a strategy in an organization.

3. In the staff questionnaires, in order to investigate the above item in improving the assessment of the organization, firstly by integrating the questionnaire's questions, we defined an index as the question of "whether the combination of David's model with the BSC is effective in improving the organization's assessment", and then, the average equality test was use in SPSS software. We conducted the test at 95% confidence level, and the following results are obtained: a significant coefficient of 0.000 and a degree of freedom = 339 and $t = 120.871$, and an average of = 3. the Sig value is less than 5% and this means that H_0 is rejected and the claim is accepted and with 95% of confidence it can be claimed that: the importance of the above question is higher than test value (3) and we can conclude that from the employees' point of view, the combination of David's model with BSC improves the assessment in the organization.
4. In the staff questionnaires, in order to investigate the improvement of control of the organization, firstly by integrating the questionnaire questions, we defined an index as the question of "whether the combination of David's model with the BSC is effective in improving the organization's assessment", and then, the average equality test was use in SPSS software. We conducted the test at 95% confidence level, and the following results are obtained: a significant coefficient of 0.000 and a degree of freedom = 339 and $t = 142.64$, and an average of = 3. the Sig value is less than 5% and this means that H_0 is rejected and the claim is accepted and with 95% of confidence it can be claimed that: the importance of the above question is higher than test value (3) and we can conclude that from the employees' point of view, the combination of David's model with BSC improves the control of the organization.

In the staff questionnaires, in order to investigate the effectiveness of combining the two models Included in Strategic Planning, firstly by integrating the questionnaire questions, we defined an index as the question and then, the average equality test was use in SPSS software. We conducted the test at 95% confidence level, and the following results are obtained: a significant coefficient of 0.000 and a degree of freedom = 339 and $t = 253.73$, and an average of = 3. the Sig value is less than 5% and this means that H_0 is rejected and the claim is accepted and with 95% of confidence it can be claimed that: the importance of the above question is higher than test value (3) and we can conclude that from the employees' point of view, the combination of David's model with BSC is effective in strategic planning of the organization.

Also, in order to be more reliable, the analysis of customer variance for the second cognitive group was examined. In order to equalize the mean in different ages, ANOVA was used. The obtained results are as follows: Wherever the Sig value is greater than 5%, it means that the different age categories in customers have almost identical opinions and the Sig value less than 5% indicates that at least two age groups have

different opinions and, if H_0 is given, then the proposed statement is accepted. Also, for the gender variable, the variance equation test was used and then, the average equality of the two communities was made for both equality and non-equality of Variance. First Sig is related to the variance; wherever the Sig value is greater than 5%, it means that the different genders in customers have almost the same views, and H_0 is accepted, and wherever Sig is less than 5% indicates that the assumption H_0 is rejected and the H_1 assumption is accepted, This means that different genders have different opinions in their customers.

The second Sig is for the purpose of average equality in different genders, and the result indicates that the average in the two populations is not equal.

Also, in order to equalize the mean at different levels of education, ANOVA was used. Results: Wherever Sig is more than 5%, it means that the different grades of education in the customers have almost the same views and the Sig value of less than 5% indicates that at least two grades of education have different opinions; H_0 will be rejected and the proposed statement will be accepted.

Also, in order to be more reliable, the analysis of variance of employees for the second census was examined. In order to have a mean equation for different ages, the variance analysis was used. Results: Wherever the Sig value exceeds 5%, it means that the different age groups in staff have almost the same opinions and the Sig value less than 5% indicates that at least two age groups have different opinions; the H_0 hypothesis is rejected, and the proposed statement is accepted. Also, for the gender variable, the variance equation was firstly used, and then, the average equality of the two populations was made for both equality and non-equality of variance. The first Sig is related to the ANOVA; wherever the Sig value is greater than 5% means that the different genders in the employees have almost the same views, and H_0 is accepted, and wherever Sig is less than 5% indicates that the assumption H_0 is rejected and the H_1 assumption is accepted, that is, there are different views among the different genders of staff.

The second Sig is for the purpose of average equality in different genders, and the result indicates that the average of the two populations is not equal.

Also, in order to evaluate the average equality at different levels of education, ANOVA tests were used. Results: Wherever the Sig value exceeds 5%, it means that the different educational grades in employees have virtually similar views and the Sig value less than 5% indicates that at least two grades of education have different opinions; H_0 will be rejected and the proposed statement will be accepted.

In order to evaluate the average equality at different levels of work experience, ANOVA tests were used. Results: Wherever the Sig value exceeds 5%, it means that the different work experience in employees have virtually similar views and the Sig value less than 5% indicates that at least two different level of work experience have different opinions; H_0 will be rejected and the proposed statement will be accepted.

Also, for the gender variable, the Equation Test of two Variances was used at first, and then, the average equality of the two populations was made for both equality and non-equality of variance. The first Sig is related to the variance test; wherever the Sig value is greater than 5% means that the different genders in the employees have almost identical opinions and H_0 is accepted, and wherever Sig is less than 5% indicates that the H_1 hypothesis is accepted and H_0 is rejected, which means that there are different views among the different genders of the employees.

The second Sig is for the purpose of average equality in different genders, and the result indicates that the

average of the two populations is not equal.

Friedman test has been used to rank customer and employee responses. This is for the purpose of determining "what is the best indicator and satisfaction from the customers' and employees' point of view.

In order to rank the level of people satisfaction from the company's services, the following results were obtained: Questions 7, 14, and 23 ranked highest in the customer rating, with an average rating over 18. The next rank is related to Question 16, with the average of 17.80, and the next ranks is related to Questions 13 and 22. With a rating above the average of 16, and the lowest average score is for questions 4 and 11, and the question 17 with an average of about 4.

We used Friedman test to rank the employees' indexes; the first and the 16th questions have the highest rank with an average of 26. The next ranks are related to questions 9, 10, 18, and 20 with an average of 24 and the lowest rank is for question 16 with an average of 6.94.

At the end, to reach the overall conclusion, the question arises: is it possible to eliminate or mitigate the weaknesses of the David model using BSC model? According to the obtained results, for more reliability, the results of the analysis of variance of customers for two demographic variables were examined. In order to equalize the mean in different ages, ANOVA was used; wherever Sig value was greater than 5%, it means that the different age categories in the customers have almost the same views and the Sig value of less than 5% indicates that at least two age groups have different opinions; H_0 is rejected, and the proposed statement is accepted. Also, for gender variables, we used the test for equality of variance in two populations and then, we compared the mean of the two communities for both equality and non-equality modes. The first Sig is related to the variance test; wherever the Sig value is greater than 5% means that the different genders in the customers have almost the same views and H_0 is accepted, and wherever Sig is less than 5% indicates that the H_0 is rejected and H_1 is accepted; which means that the different genders in the customers have different opinions.

The second Sig is for the purpose of average equality in different genders, and the result indicates that the average of the two populations is not equal.

Also, in order to evaluate the average equality at different educational grades, ANOVA tests were used. Results: Wherever the Sig value exceeds 5%, it means that the different educational grades in customers have virtually similar views and the Sig value less than 5% indicates that at least two different educational grades have different opinions; H_0 will be rejected and the proposed statement will be accepted.

Also, in order to be more reliable, the analysis of variance of employees for two demographic variables was examined. In order to reach the mean equation for different ages, the ANOVA tests were used. Results: Wherever the Sig value exceeds 5%, it means that different ages in staff have almost the same opinions and the Sig value of less than 5% indicates that at least two age groups have different opinions and, if H_0 is given, then the proposed statement is accepted. Also, for the gender variable, the equation test for two variances was used at first, and then, the average equality of the two populations was made for both equality and non-equality of variance. The first Sig is related to the variance test; wherever the Sig value is greater than 5% means that the different genders in the employees have almost identical opinions, and H_0 is accepted, and wherever Sig is less than 5% indicates that the H_0 is rejected and the H_1

is accepted, which means that there are different views among the different genders of the employees.

The second Sig is for the purpose of average equality in different genders, and the result indicates that the average of the two populations is not equal.

Also, in order to evaluate the average equality at different educational grades, ANOVA tests were used. Results: Wherever the Sig value exceeds 5%, it means that the different educational grades in customers have virtually similar views and the Sig value less than 5% indicates that at least two different educational grades have different opinions; H_0 will be rejected and the proposed statement will be accepted.

In order to evaluate the average equality at different work experience levels, ANOVA tests were used. Results: Wherever the Sig value exceeds 5%, it means that the different work experience levels in employees have virtually similar views and the Sig value less than 5% indicates that at least two different educational grades have different opinions; H_0 will be rejected and the proposed statement will be accepted.

Finally, the Friedman test was used to rank customer and employee responses. This is to determine what is the best indicator and satisfaction from the employees and customers' point of view.

As can be seen, given that the Sig value in this is less than 5%, therefore the H_0 is, based on the ineffectiveness of the BSC model in the organization, is rejected and we conclude that the implementation of this model in the organization is effective. In order to evaluate the improvement percentage and the reduction of weaknesses of the David model by implementing the BSC in the organization, we compared the ratio of variables before and after the implementation of BSC in the organization. Implementation of BSC showed that in the financial perspective, from 98.3% of the people point of view, about 60% = 1. 2 times, from 93.3% of the people point of view about 65% = 1. 3 times improvement has been achieved; in the internal processes perspective, about 65% = 1. 3% has been achieved from the viewpoint 100% of people, and in terms of growth and learning, 94.9% of people namely about 65% = 1. 3 times is improved. The improvement value is 1 to 1.5 times. In financial perspective, it is equal to 2.1 times. In the customer perspective, 1.3 times, in the internal perspective, 1.3 times improvement and in learning and growth 1. 3 times improvement is achieved. It can be said that in the financial perspective, about 60% improvements and in the other perspectives, 65% improvement have been achieved.

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