

# Designing a Network of Themes for Evaluating the Performance of Entrepreneurial Companies of Industrial Holdings with a Sales & Operation Planning Approach

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## Abstract

One of the most important measures in Iran is to provide conditions and activate all facilities and financial and capital resources to develop entrepreneurship and maximize the participation of entrepreneurial companies in economic activities. In the current era, dramatic changes in management knowledge have made the existence of an evaluation system inevitable, and proper performance measurement provides appropriate conditions for achieving business goals and success (Adeli, 2005). Thus, the present study was carried out with the aim of achieving a simple, practical and innovative performance evaluation model with a sales and operation planning approach to evaluate entrepreneurial companies of industrial holdings. In this research, documentary studies and then semi-structured interviews were performed with selected experts and notes were taken from them by qualitative thematic analysis method and the themes were categorized until theoretical saturation was achieved. The present study is developmental-applied in terms of aim and field in terms of method. The statistical population consists of managers of four active holdings in the area of automobile parts manufacturing and in the qualitative section, it included shareholders or main owners of four automobile parts manufacturing holdings and academic experts. Using purposeful sampling method by conducting 12 individual interviews, after analyzing the data, 55 items were formed in the form of 7 main themes. Main themes included finance and shareholders, markets and customers, research and development, human resource, logistics, technology and information, and continuous internal improvement. By calculating the two indices of content validity ratio and content validity index, the validity of all factors and indices was confirmed.

**Keywords:** performance evaluation, sales and operation planning

**Tob Regul Sci. <sup>TM</sup> 2022;8(1): 3231-3254**

**DOI: [doi.org/10.18001/TRS.8.1.246](https://doi.org/10.18001/TRS.8.1.246)**

## Introduction and problem statement

Every organization requires evaluation to be aware of the desirability and quality of its activities, especially in complex and dynamic environments. Also, lack of control and evaluation system

means lack of establishing communication with the internal and external environment of the organization. Its consequences are old age and ultimately the death of the organization. The phenomenon of organizational death may not be felt by senior managers due to its non-occurrence, but studies show the lack of feedback system makes it impossible to make necessary reforms to grow, develop and improve activities and finally this phenomenon leads to organizational death (Adeli, 2005). As long as organizations strive for survival and feel the need to be present in the national and global arena, they must consider the principle of continuous improvement at the priority of their work. This principle is achieved only by improving performance management.

This improvement can be achieved by obtaining the necessary feedback from the internal and external environment, analyzing the strengths and weaknesses and opportunities and threats of the organization, taking responsibility and customer satisfaction, by creating and using a performance evaluation system with an appropriate model. To achieve success, it must have a framework and organizational performance improvement must be based on knowledge of a process called performance cycle. Every organizational performance improvement plan must start from performance measurement (Elahi, 1999).

Creating an entrepreneurial business anywhere in the world is a basic condition for the development of any country in the 21st century, but entrepreneurship in any country faces great barriers and our Iran is no exception in this regard. Some of the major barriers to entrepreneurship in this regard include the existence of cumbersome administrative regulations, the prevailing attitude of society, lack of attention to entrepreneurship and production in the industrial and productive sectors in the country, low teamwork spirit, lack of information support, facilities and credits problems, educational problems, sanctions and currency transfer problems, problems related to economic indicators, the existence of increasing inflation in society, the existence of official imports or smuggling of various industrial products.

Given what was stated above, different companies in industrial holdings are established with different systems and complexities annually. It should be noted that all these organizations using different models, methods and indicators to control and evaluate the performance of the organization. Since these companies are in their infancy, the use of different models of monitoring and performance evaluation such as ISO 9001 or control and analysis of financial statements and indicators for these organizations has not been desirable. Also, due to lack of control indicators in all related areas such as production, sales, supply and marketing, engineering and quality, etc., it does not have the necessary comprehensiveness and will have low productivity. Hence, survival of these companies requires managers to pay attention to the external environment and evaluate and analyze the performance of their companies using a simpler and more effective model.

Given the challenges in business environments, several paradigms have been proposed in this regard. One of them is sales and operation planning. Intensifying the competition scene in an environment that is constantly changing has doubled the responses of industrial holdings to start-ups and entrepreneurs. Without using an appropriate model, the goals will not be achieved. Sales and operation planning is a process through the integration of customer plans, marketing for current and new products with supply chain management enable management to strategically direct their business and achieve a sustainable competitive advantage. It should be noted that to implement the sales and operation planning properly and correctly, organizations should

consider how to evaluate performance and also changes in this evaluation. Proper performance measurement provides conditions in line with the desired business goals. Therefore, the main issue is to design a simple, practical and innovative model for to evaluate the industrial holdings.

## Methods

The main aim of this qualitative research is to review and extract the categories related to evaluating the performance of entrepreneurial companies of industrial holdings with sales and operation planning approach. It is a development-applied research in terms of aim and field in terms of method of conduction. First, to collect information, documentary studies and the researcher's inference were used. Then, semi-structured interviews were performed with selected experts and notes were taken from them qualitatively and the thematic analysis and extraction and categorizing of them themes continued until a new code was not created in the interviews and theoretical saturation was obtained. In the individual interviews with the interviewees, seven interview questions were used for the preliminary review, while other sub-questions were asked along with each question to understand the participants' experiences during the interview. The asked questions in the interview process were:

1) In your opinion, which of the characteristics of sales and operation planning can be effective in designing a performance evaluation model for entrepreneurial companies of industrial holdings? 2) In your opinion, which of the basic components of sales and operation planning (including: people, process, technology, strategy) can be effective in designing the performance evaluation model of entrepreneurial companies of industrial holdings? 3) In your opinion, what are the indicators in the basic field of sales and operation planning that is effective in designing the performance evaluation model of entrepreneurial companies of industrial holdings? 4) In your opinion, what are the other main components in the area of sales and operation planning that can be effective in designing the performance evaluation model of entrepreneurial companies of industrial holdings? 5)

In your opinion, which of the empowering elements of sales and operation planning (including: finance, supply and demand, new products, markets and customers) can be effective in designing the performance evaluation model in entrepreneurial companies of industrial holdings? 7) In your opinion, what are the main other components in the area of sales and operation planning that can be effective in designing the performance evaluation model of entrepreneurial companies of industrial holdings?

The statistical population of the research included two groups. The first group included the board of directors of four large automobile parts manufacturing holdings. Their inclusion criteria included 1. At least fifteen years of experience in industrial and entrepreneurial activity in the area of parts manufacturing industry, 2. Mastery of entrepreneurship, performance evaluation and production and operations issues, 3. At least a master's degree and also academic specialists with the following criteria: educators and activists with academic background in the area of business and management and having at least ten years of teaching and research experience, who were interviewed by purposeful sampling method to the stage of theoretical saturation.

Based on this method, the sample size in the group of experts was equal to 12 people and they underwent in-depth semi-structured interviews in line with the objectives of the research and from the ninth interview onwards, there was a repetition of the received information, but this process continued until the twelfth interview to for assurance. After collecting data from the

interviewees, they were analyzed using thematic analysis method. In general, thematic analysis is an appropriate method to establish the transfer of concepts among researchers in different disciplines and with different orientations, and the relationship between different philosophical approaches and between theorists and executors. The thematic analysis method used in this research has six phases as described in Table (1) (Braun and Clark, 2006).

**Table (1): Stages of thematic analysis**

Stage	Explanation
Familiarity with data	Writing the data if necessary (orally), reading and re-reading them, recording initial ideas
Creating basic code	Encoding the desired data regularly throughout the data set, matching and sorting the data with each of the codes
Search for themes	Matching codes to potential themes and collecting all data related to each of the potential themes
Reviewing the themes	Investigating potential themes with extracted codes (level 2) and data set (level 1) and finally creating an analytical network of themes
Defining and naming the themes	Continuous analysis to refine the characteristics of each "theme", comprehensive citations, clear definitions and names for each theme
Compilation of reports	Last opportunity for analysis, selection of clear and obvious samples, final analysis of analytical extraction related to research and literature questions and compilation of an academic report of analysis

Finally, thirteen initial codes with a total of 28 frequencies were extracted from the semantic units. Also, forty-two factors extracted from sources. Hence, a total of fifty-five initial codes and 7 themes, including finance and shareholders, markets and customers, research and development, human resource, logistics, technology and information, continuous internal improvement were extracted. Also, sub-categories included technology development, product development, provision, operations, and supply. Creswell recommends using several strategies to verify the findings and ensure the validity and reliability of the research. Thus, the researcher used Morse and Gibbs strategies for research validity and reliability (Creswell, 2018) which include: selecting the appropriate sample, simultaneous data collection and analysis, theory-based thinking, and coherence in research methodology. Hence, in the present study, to increase validity, attempts were made to ensure that participants were carefully selected and qualified for the research.

Also, data collection and analysis were performed simultaneously in such a way that coding was done after each interview and then the next interview was performed. Also, for the reliability of the research, the interviews were documented to examine all the details and the guidance of professors in the coding process was used. In the last step, to validate the mentioned factors and indicators, the opinions of five academic and executive experts were used and they were asked to consider these cases in terms of "relevance and necessity" in designing a performance evaluation model with the sales and operation planning approach.

In this section, the researcher sought to examine the content validity of factors and indicators related to performance evaluation factors with a sales and operation planning approach, so this group of 5 people was asked to evaluate these cases in terms of relevance and necessity with the sales and operation planning approach. After collecting information and to check the content validity, two indices of content validity ratio and content validity index were calculated. It should be noted that if the value of the content validity index is greater than 0.79 and the value of the content validity ratio coefficient for a panel of 5 experts is 0.99; the content validity will be confirmed. Based on the results, the value of content validity ratio index for all factors and indicators was greater than 0.99 and the value of content validity index for all factors and indicators was greater than 0.79, so it can be said that all factors and indicators have content validity.

## Research background

In general, three types of performance evaluation, including individual, group and organizational performance evaluation in performance evaluation in organizational and management. Since organizational performance evaluation is considered in this study, the concepts and definitions of this area are examined. Organizations, regardless of the type of activity, structure, size and maturity, achieve their strategic goals and objectives; need to establish an appropriate management system. Thus, one of the main reasons for organizations to use performance evaluation systems is to support the implementation of the desired strategy to improve their performance.

Performance measurement systems, by helping to transform the organizational strategy into desirable behaviors and outcomes, establish a relationship between expectations and monitoring the progress of activities can play a major role in implementing the strategies (Tipping, 1995). There is rich theoretical and research literature in the area of performance evaluation of organizations. However, the sales and operation planning approach has not been studied and this can be considered as an innovative characteristic of this study.

In his study entitled "examining and ranking of performance evaluation indicators with emphasis on financial indicators using BSC", Khatami (2015) showed that financial indicator were ranked first, customers indicator was ranked second, and the growth, learning and internal process indicators were ranked third and fourth, respectively. In another study entitled "A multidimensional performance evaluation using the combination of AHP and BSC", Haddadi (2013) concluded that among the balanced scorecard views, the financial perspective is more important than others according to the judgments of managers. In three financial, the customer and internal processes perspectives, it has the best performance

In their study entitled "Application of BSC and AHP in performance evaluation to rank the dimensions of the balanced scorecard", Shoghli and Roshanas (2015) stated that providing and

developing a suitable combination of BSC and AHP techniques can be used in educational environments, in planning and improving the performance of a similar educational system, by improving the quality of performance evaluation and educational ranking. In his study entitled “performance evaluation using the combined method of BSC, TOPSIS and AHP”, Raji (2012) concluded that the traditional evaluation does not reveal all the facts about the performance of companies so that a company with first rank in one perspective may obtain the fourth rank in another perspective. Sohrabi et al. (2012) examined the model of using fuzzy hierarchy and balanced scorecard to select the appropriate planning system and stated that the researchers' proposed approach is a useful tool for selecting the planning system and can be used in other industrial and service sectors. Varmazyar et al. (2016) presented a new comprehensive approach based on BSC and MCDM methods to evaluate the performance of research centers and organizations.

Yadav and Sharma (2015) presented a coherent approach based on data development analysis and AHP method to evaluate the performance of suppliers in the automobile industry. Kadarova et al. (2014) combined the BSC and DEA methods to achieve comprehensive performance and efficient process management systems for efficient and effective industrial systems. In a study entitled “The implementation of the Balanced Scorecard in a public organization in the United States”, Farneti (2009) concluded that a balanced scorecard should be considered to implement the following three goals: 1- Necessary control according to the strategic goals of the government 2-Use the results of evaluations progress and improvement in the future. 3-Meeting the legal needs for strategic control. A noteworthy point in the study conducted by Rajouei et al. (2017) with the aim of designing performance evaluation indicators using BSC and AHP methods is that among the performance evaluation indicators, customer perspective was ranked first and the growth and learning, internal processes and financial, respectively, were ranked next. Another significant point is that customer satisfaction is in the highest priority and financial performance improvement is in the lowest priority of performance evaluation of the Social Security Organization.

Hajian et al. (2007) examined the performance evaluation model of industrial research centers using the EFQM model and finally the components considered for evaluation in the form of selected criteria including: research leadership and management, research policies and strategies, capital growth and learning of human resources, partnerships and financial and information resources, internal processes, results of users and beneficiaries of research, results of human capital, and results of society were the key results of performance.

Also, according to the results obtained from the prioritization of empowerment criteria, leadership and research management and policy and research strategies compared to other criteria have a total of more than 60% of the total score of the empowerment criteria and 30% of the total score of the model criteria. Also, after prioritizing the results criteria, it was found that the criteria of results of users and the results of human capital compared to other criteria explained more than 60% of the total score of the criteria of the results and a quarter of the total score of the model criteria. Therefore, paying special attention to these criteria to growth and excellence of non-industrial research organizations and gaining more scores based on this model has a great importance.

## Literature Review

### Performance evaluation

The first view of performance evaluation, which was probably developed during the 1950s, was very simple. Performance evaluation was defined as the extent to which an organization achieves its goals. However, there were several ambiguities in this definition that limited the researchers' use of it. An example of the ambiguity that existed was to which these goals belong in defining performance evaluation? Are the goals long-term or short-term? Are the official goals of the organization intended or real goals? If we consider the goal that most researchers and organizational thinkers agree on and are a necessary condition for the success of an organization, our views will be clarified. The organization is engaged in activities, because aims to continue its life. Performance evaluation in the organizational dimension is usually synonymous with the effectiveness of activities. Effectiveness refers to the extent to which goals and plans are achieved with the characteristic of efficiency of activities and operations.

Performance evaluation is one of the most important concepts that has long been the focus of experts and despite much study and research, the ambiguities about what performance evaluation is and what indicators should be used to evaluate it, have remain unsolved. Performance evaluation in the dictionary means the size of the effect applied on people and actions (Khaliqi, 2008). However, what behavioral scientists are looking for is much deeper and broader than the perceptions of ordinary people, and some of the concepts of performance evaluation are mentioned below: Etzoni defines performance evaluation as the level of achieving the goals. Fedler, who proposed the theory of effective leadership, considers performance evaluation to include the manager's relationship with colleagues, the amount of work predetermined, and the amount of power a manager obtains from his or her position.

Redin argues that performance evaluation refers to the amount of work that managers can achieve specific results or specific needs through proper management in the organization's position. Caldwell and Spinks say that performance evaluation is the size or extent to which a plan achieves its goals. At the same time, he argues that performance evaluation depends on the personality, behavior and expectations of the manager, subordinates, colleagues, and the organization. Caldweel and Spinks argue that performance evaluation is the size or extent to which a plan achieves its goals. Toto believes that organizational performance evaluation is a rotating and continuous process that begins with the design of the plan and includes all activities that are in line with achieving the goals of the organization and determine desirability of doing them.

Mirkamali defines performance evaluation as achievement of individual and organizational needs, goals and objectives, which is associated with a kind of individual and organizational satisfaction. As a result, in addition to increasing production, efficiency and productivity of organization raises people's morale and sense of responsibility and will make them feel satisfied and happy with their work and organization (Mirkamali, 1994). Hoy and Miskel define it as the practical description to achieve a goal. They also define performance evaluation as the manager's ability to have a superior position in negotiations with their environment and use their position to gain scarce and valuable resources. This definition of performance evaluation focuses on the process of continuous behavioral exchange and correlation and competition in obtaining scarce and valuable resources. Organization and management must be both effective, that is, provide

the means to achieve the goals of the organization and be efficient. In other words, they must use of minimum resources to achieve the goals (Hoy and Miskel, 1992).

### **Sales and operation planning**

Sales and operation planning is a general planning process that aims to balance supply and demand at a general and cumulative level. Sales and operation planning is an internal process in business management developed by Richard Dick Ling in 1980s. Sales and operation planning includes updated predictions that lead to sales plan, production plan, warehouse plan, customer delivery plan, new product production plan, and final financial plan. Although the sales and operation planning refers to the intersection of sales and operation, the agreed outcome should drive the financial plans.

Sales and operation planning is a monthly tactical planning process. This process is directed by the senior management of the organization and its task is to balance the demand with the ability to supply including production, distribution, logistics and financing with the aim of maximizing the level of customer service at an optimal cost so that organization's management be ensured that plans and performance of task units are in line with the strategic plan of the organization. In other words, sales and operation planning is an integrated planning process that collects and evaluates all plans from all task units and discusses any conflicts in the units plan, and finally presents the output in the form of a set of unified plans to coordinate, balance, and control the performance (Fleischman et al., 2015). Traditionally, sales planning, production, distribution, and procurement have been done discretely and based on different and sometimes conflicting logics and goals. Sales managers tend to focus on sales volume and profit margins, while the main goal and function of production, distribution and logistics units is to cost saving. In conditions where different products are produced with different cost-effectiveness and sold to sales centers in different regions at different prices, discrete planning usually leads to non-optimal decisions and results or local optimization, because the highest profit or lowest cost in one region does not guarantee the greatest total economic profit.

Studies in sales and operation planning have generally focused on definitions, processes, activities, procedures, and case studies so far. Sales and operation are the two cores of today's businesses and the decisions made in these areas severely affect the financial performance, operational effectiveness and service level of the organization. Traditionally, decisions in these two areas are taken separately and in little coordination with each other. Sales decisions are generally made with an emphasis on the volume of product sales, without considering the profits of the entire organization. Also, production decisions focus on minimizing production costs, maximizing material efficiency, and maximizing equipment and human resource productivity. Basically, these two tasks have different responsibilities and measurement indicators that tend to improve local performance and put little emphasis on the total profitability of the organization (Wahlers and Cox, 1994).

The term of sales and operation planning originates from the articles on production requirements planning, where some authors have used it as an alternative responsibility for integrated production planning. Since 1980, the concept of sales and operation planning has been expanded and the sales planning has been included in the sales and operation planning process. This relatively integrated sales and operation planning is still used by many researchers and engineers. The relationship between sales task units and the importance of each has been mentioned by



Wahlers and Cox (1994). They suggest that the relationship between sales tasks and operations can be used with the help of competitive indicators to improve the overall performance of the organization. The goal of combining sales and operation plans is to balance demand with production capacity. To achieve this goal, two types of planning decisions can be considered:

On the one hand, demand can be changed to comply with production constraints. This method is known as the aggressive approach. On the other hand, it is possible to change the supply capacity to adapt to sales plans, which is known as the reactive approach. Olhager et al. (2001) discuss on reactive sales and operation planning where supply capabilities to meet demand change. In contrast, some studies view sales and operation planning as a tactical or medium-term planning process that combines strategic and long-term business plans with short-term operational plans vertically and relates the supply and demand horizontally.

Recent studies show the use of sales and operation planning to coordinate value creation chain activities. These studies view sales and operation planning as the responsibility of a coordination and synchronization mechanism that adapts demand production to supply chain capabilities by synchronizing marketing, production, purchasing, logistics, and finance decisions and activities. It also expands the idea and suggests that sales and operation planning should align customer demand with supply capacity in a profitable manner in line with business strategies. In a broader sense, the supply chain includes four basic stages: supply, production, distribution, sales (Olhager et al., 2001).

- Documenting the current status of inventories
- Reviewing and modifying sales predictions (based on a comparison of planned and real sales of previous years)
- Documenting of proven capacities
- Modifying production rates within the framework of capacity and material constraints
- Calculating expected inventory status and comparing with target levels
- Selecting a strategy to develop an integrated production plan based on logical changes in sales and production plans ([website irnabcg.com/](http://www.irnabcg.com/))

The American Product and Inventory Control Association defines sales and operation planning as a process that through the integration of customer plans becomes the marketing center for these new and existing products. With supply chain management, it provides the ability for management to direct its business strategically and achieve a sustainable competitive advantage (<https://www.management.ut.ac.ir/>).

Also, George Palmateir of Oliver White Company and later Bentli Nevada, as CEO, discussed sales and operation planning as one of the most important factors in the organization progress. It is one of the business processes and techniques that enables the organization to respond effectively to changes in supply and demand, considering the market needs and the goal of achieving maximum profitability in the supply chain (Muzumdar & Fontanella, 2006).

Dick Ling, the father of sales and operation planning, defines this process as integrated business planning process that enables management to manage its business strategically to achieve competitive advantage continuously by integrating customer-oriented plans with new and existing products with supply chain management. Thus, the recent definition of S&OP is the decision-making process, balancing supply and demand, coordinating volume and integrating operational and financial plans.

It is clear that most organizations are trying to balance supply and demand in their supply chain. Another common problem that companies face is that demand is greater than their production capacity. The selection of a product that consumes a resource for supply or the allocation of a critical resource to a particular product must be done to ensure the highest possible level of profitability. Without doubt, all supply chain experts seek to reduce uncertainty and improve risk management methods. Sales and operation planning is a way to achieve this goal (Akbari Jowkar and Heidari, 2006). Planning means making decisions often before the work is done. Sales and operation planning has a direct impact on profitability, performance, customer satisfaction and product portfolio provided by the company (Muzumdar & Fontanella, 2006).

The mutual goals of sales planning and profitability operations in future periods are to ensure market satisfaction and prepare the market for long-term sales. It is clear that the sales unit must plan its operations. Management of the current products demands planning when introducing new products. The reason for coordinating these operations is that sales are entirely focused on output. What is valuable in this regard is finding real customers who are willing to pay for the company's products. However, operation unit focuses on delivering products to sales. It seems that all required from operation unit is the delivery of orders to the customer that has been applied by the sales unit. Thus, why sales unit should not notify its planning simply to operation? The problem arises from the operation unit unequivocal adherence to the sales unit needs occurs when the operation fails to properly support the sales plan. The theory of constraints is another reason for cooperation of sales in planning. The theory of constraints logically suggests that priorities for specific sales efforts should be directed in accordance with the real load on capacity constraint resources, otherwise, revenue will be lower than its actual potential and what has been planned for it. The nature of design of units in most factories causes a lack of communication in the planning process. Each of the operational units has its own goals and tries to take steps towards optimizing its own process. Integration mechanism that focuses on different areas of focus in line with common goals and strategies to achieve the company's overall goals is sales and operation planning.

Sales and operation planning is definitely the final agreed sales prediction and construction plan to achieve it. The macro view of the plan creates a balance between expectations and ideals in terms of demand and achievable reality in terms of supply. The sales and operation planning establishes an association between the annual review of strategic plans and the details of operations that are adjusted and reviewed monthly. The sales and operation planning creates an integrated alignment between product planning, demand planning, supply planning, and financial planning. When changes occur in one area, the expected impacts from other sectors are identified. Sales and operation planning is one solution for companies looking to provide a strategy for managing and counteracting risk as profitability increases. The sales and operation planning determines the direction of targeted leadership. Each unit is trying to optimize its area of operation. This is the traditional method used to better management of businesses. Experience has shown that this attitude leads to results lower than the optimal level for the company (Akbari Jowkar and Heidari, 2006).

## Results

Table 2 shows the descriptive findings of the demographic characteristics of the participants.

**Table (2): Demographic information of the participants**

Gender	Male	9
	Female	3
Education	Master	4
	PhD	8
Age	30 to 40 years	4
	41 to 50 years	5
	Over 50 years	3

Table 3 presents an example of the semantic units and the related code

**Table (3): Some results of interview analysis**

Document	Initial code	Semantic unit
M5 M11	The organization's belief in continuous improvement of the organization	Continuous improvement of optimization processes is sales and operation planning. In SOP, continuous effort to improve services, products, or processes is called continuous improvement. This effort is in the form of incremental improvement over time, usually for products, services or processes that have reached sufficient maturity or growth, or one-step progress for new products, services or processes.
M5 M10	Paying attention to financial and economic approaches and processes and their correct implementation	In all holdings and organizations, processes play a key role. Processes for the organization are like mountaineering tools for the climber on the path to reach the top of the mountain. Hence, the most important approach is related to finance. Paying attention to financial and economic approaches and processes and their correct implementation creates order and the existence of this order causes the organization to monitor and control the consumption of its financial resources carefully.
M1		In evaluating the performance of

M11	Integrating and aligning financial and operational plans	<p>organizations, one of the most important issues in holdings is strategic planning.</p> <p>Large holdings have been involved in model excellence for several years and in criterion 2 and sub-criteria 1, there is a discussion of identifying the needs and expectations of the organization's stakeholders.</p> <p>Of course, expectation is the main and essential component and the need is beyond it. Thus, it is important to identify the needs and expectations of the shareholder who are among the most important members of the organization stakeholders and the main willingness of shareholders is realization of the sales budget. In December of each year, based on the information and sales predictions of OEM customers and AM market predictions, the sales budget is prepared and based on it, Rial and foreign currency budgeting is extracted and one of the most important things in evaluating the performance of holdings is budgeting and financial planning issues</p> <p>Proper budgeting and planning and predicting of financial resources make the prediction of expenses done correctly and pave the way for moving towards the goals. These financial plans should be designed in line with budget and operations.</p>
M3 M4		<p>One of the most important indicators that should always be considered to and constantly monitored in the organization is liquidity indicators. This part is like a driver who keeps the car on its path on the road by constantly adjusting the movement of the steering wheel to be in the right direction. If this control is not done, the car will definitely get off the road at one point and It brings disaster. If financial plans are not under control,</p>

		<p>we will definitely deviate. Financial issues are one of the important factors in performance evaluation. Based on the budget prepared at the end of each year for the next year, a three-year prediction according to BP (business plan) is developed for organization and operational plans and financial plans are integrated.</p>
M3 M6	Utilizing a formal and codified approach and process for product development	<p>In my opinion, product development plays a key role in holdings and should be constantly monitored. There are five elements to product development: the first is to identify design criteria that include brainstorming on new products, and when a product idea is identified, it can use a formal product development strategy. The second is to analyze the idea, which includes more accurate evaluation of product.</p> <p>Market research and conceptual studies to determine the business context of the company or consumer of the idea can be used as a basis. The third is the emergence of a concept that involves turning the opportunity of a particular product into a tangible concept.</p> <p>Fourth, initial sampling, which includes the initial sample of a product with a certain commercial value, and initial sampling in this area means the rapid production of a product, not a product that is to be tested and marketed later.</p> <p>Fifth, product development, which includes ensuring product sustainability and decision-making to create business and product value of the product. Thus, all of the above mentioned factors should be used in the form of an approach and flowchart and the definition and step-by-step process. Therefore, to organize such a process, an executive method and related</p>

		guidelines must be written and used.
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Open or initial coding begins with examining each line or set of data lines, and naming their internal actions or events (Safari Shali, 2005; 78). After the initial coding, the thematic operation was performed and the researcher ensured that the themes had reached theoretical saturation. The results show that 13 initial codes with a total of 28 frequencies are extracted from semantic units. According to the frequency of codes, the initial codes of integration and alignment of financial and operational plans, and the use of up-to-date information technologies with 4 frequencies have the highest coefficient of importance and employees' sense of belonging to organization, synchronization and establishing a link between supply and operations activities and inventory management, status of identification, documentation and evaluation of improvements with 1 frequency had the least coefficient of importance. Axial coding develops analytical work resulting from initial coding and, to a lesser extent, regulatory coding. The aim of this coding method is to put together data that have been separated or broken in the initial coding process. "Axis" in axial coding is a theme derived from the first round of coding (Saldena, 2016: 326).

Based on the results, after axial coding, seven main themes were identified: 1. Finance and shareholders, 2. Markets and customers, 3. Research and development (technology, product development), 4. Human resource, 5. Logistics (supply, operations, supply) 6. Technology and information, and 7. Continuous internal improvement. The results showed that the financial and shareholders theme with 10 frequencies and the human resources theme with 3 frequencies, respectively, had the most and the least significant units based on quantity. It indicates that the participants have more emphasis on financial characteristics and shareholders. As mentioned, the results show that thirteen initial codes were extracted from the semantic units, which along with forty-two factors extracted from the sources, a total of fifty-five initial codes and 7 themes, formed the core of the questionnaire designed in the quantitative section according to Table (4).

**Table (4): Initial codes and primary and secondary themes**

row	Initial code	source	Secondary theme	Primary theme
1	Obtaining the satisfaction of shareholders financially	Extraction from and library studies and sources		
2	Reviewing, analyzing and control of financial and profitability indicators	Extraction from and library studies and sources		
3	Paying attention to financial and economic	Extraction from semantic units (semi-		

	approaches and processes and their correct implementation	structured interviews)		Finance and shareholders
4	Proper planning and budgeting of financial resources	Extraction from semantic units (semi-structured interviews)		
5	Integrating and aligning financial and operational plans	Extraction from semantic units (semi-structured interviews)		
6	Alignment of organizational strategies with marketing plans	Extraction from semantic units (semi-structured interviews)		
7	Competitors control and analysis	Extraction from and library studies and sources		
8	Marketing and market share development	Extraction from and library studies and sources		
9	communication with clients	Extraction from and library studies and sources		
10	Customer satisfaction	Extraction from and library studies and sources		Markets and customers
11	after sales services	Extraction from and library studies and sources		
12	Sales growth and development rate	Extraction from and library studies and sources		
13	Opportunity	Extraction		

	recognition	from semantic units (semi-structured interviews)	Technology development	Research and Development
14	Creative ideation	Extraction from and library studies and sources		
15	Aligning technology management strategies with business strategies	Extraction from semantic units (semi-structured interviews)		
16	Management support for technology and innovation	Extraction from semantic units (semi-structured interviews)		
22	Integrating the activities of marketing and research and development units	Extraction from and library studies and sources		
17	Increasing the level of strategic capabilities in the area of technology	Extraction from and library studies and sources		
18	Focus on providing a world-class product	Extraction from and library studies and sources	Product	
19	Utilizing a formal and codified approach and process for product development	Extraction from semantic units (semi-structured interviews)		
20	Flexibility in changing the external environment	Extraction from and library studies and sources		
21	Timely release of the product in the market	Extraction from and library studies and sources		



23	Product interest in the market	Extraction from and library studies and sources	development	
24	Having a clear vision of the product development project	Extraction from and library studies and sources		
25	Employees' sense of belonging to the organization	Extraction from semantic units (semi-structured interviews)		Human resource
26	Recommendation system	Extraction from and library studies and sources		
27	Morale, motivation of employees	Extraction from and library studies and sources		
28	Workforce efficiency and productivity	Extraction from and library studies and sources		
29	employee training	Extraction from and library studies and sources		
30	Proper sourcing	Extraction from and library studies and sources	Procurement/ provision	Logistic
31	Synchronize and establishing a link between supply and operation activities and inventory management	Extraction from semantic units (semi-structured interviews)		
32	Balancing production lines	Extraction from and library studies and sources		

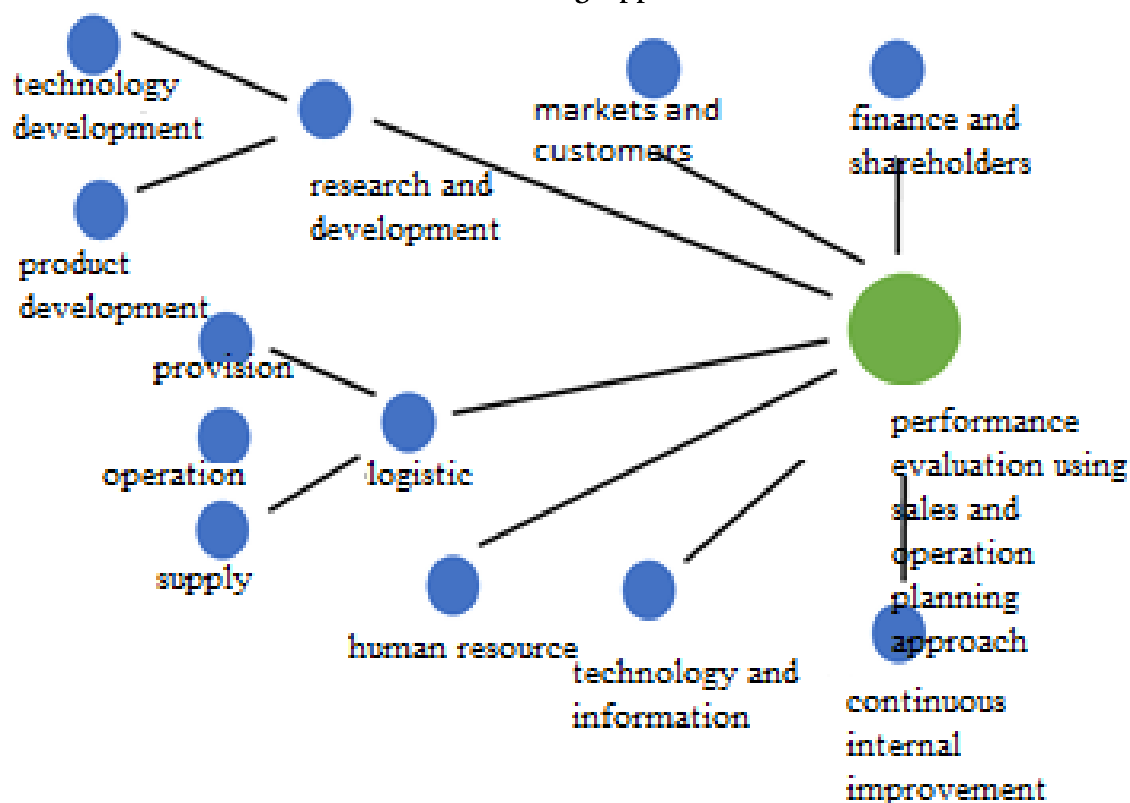
34	Quality status of suppliers	Extraction from and library studies and sources		
35	Timely delivery	Extraction from and library studies and sources		
36	Supplier evaluation score	Extraction from and library studies and sources		
37	Timely and sustainable supply capacity	Extraction from and library studies and sources		
33	Waste index	Extraction from and library studies and sources		
38	Production flexibility	Extraction from and library studies and sources	Operation	
39	Production performance control	Extraction from and library studies and sources		
40	Effectiveness and efficiency of operations	Extraction from and library studies and sources		
41	Comparing demand with capacity	Extraction from and library studies and sources		
42	Transportation and delivery logistics indicators	Extraction from semantic units (semi-structured interviews)	Supply	

43	Timely delivery of the product to the customer	Extraction from and library studies and sources		
44	plan compliance and delivery performance	Extraction from and library studies and sources		
45	Product quality	Extraction from and library studies and sources		
46	utilizing up-to-date information technologies	Extraction from semantic units (semi-structured interviews)		Technology and information
47	The cost of electronic transactions	Extraction from and library studies and sources		
48	Importance and usefulness of information	Extraction from and library studies and sources		
49	Analysis and dissemination of information	Extraction from and library studies and sources		
50	Sharing status, accuracy and correctness of information	Extraction from and library studies and sources		
51	The organization's belief in continuous improvement in the organization	Extraction from semantic units (semi-structured interviews)		
52	Focus on low-cost improvements	Extraction from and library studies and sources		
53	Status of identifying,	Extraction from semantic		

	documenting and evaluating improvements	units (semi-structured interviews)		
54	Continuous improvement process in the organization	Extraction from and library studies and sources		Continuous internal improvement
55	Utilization of KPI indicators in evaluating organizational improvements	Extraction from and library studies and sources		

Research results suggest that the factors evaluating the performance of entrepreneurial companies of industrial holdings with sales and planning approach include 7 main themes of 1. Finance and shareholders, 2. Markets and customers, 3. Research and development (technology, product development), 4. Human resource, 5. Logistics (supply, operations, supply) 6. Technology and information, and 7. Continuous internal improvement. Figure below shows the network of identified themes.

Fig. 1. Network of themes for Evaluating the Performance with a Sales & Operation Planing Approach



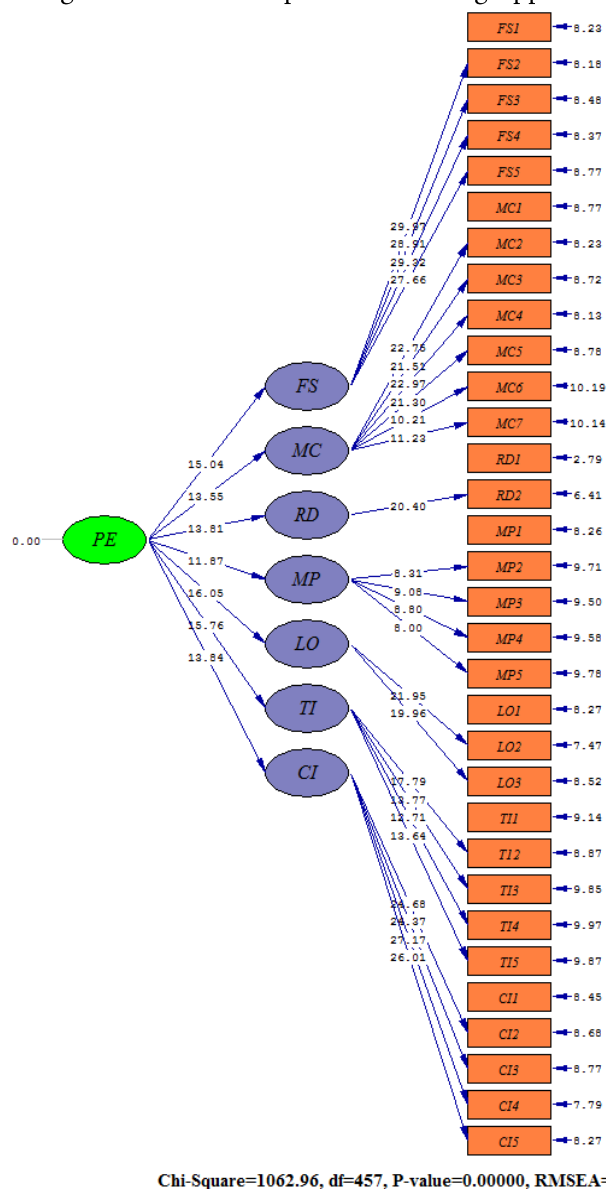


Fig.2. Performance model of entrepreneurial companies of industrial holdings (in a significant state)

### Conclusions and recommendations

Start-up industrial organizations have been looking to evaluate performance for several years. For this purpose, various models have been designed, but none of the models has used the sales and operation planning approach. The main aim of this qualitative research is to review and extract the categories related to performance evaluation of entrepreneurial companies of industrial holdings with sales and operation planning approach. The results of this study regarding the factors of finance and shareholders, markets and customers, sub-factors of provision, operations, supply and human resource are in line with those of previous studies such as those conducted by Haddadi (2013), Shoghli and Roshanas (2015), Raji (2012), Sohrabi et al. (2012), Varmarzyar et al. (2016), Farenti (2009), Rajouei et al. (2015), Hajian et al. (2013). In this regard, the finance

and shareholders and markets and customers directly and provision, operation and supply factors indirectly correspond to the internal processes of previous research and human resource factor indirectly corresponds to the growth and learning factor. It should be noted that the two factors of research and development, technology and information, and continuous internal improvement were not found in previous studies and it is a new finding of this study. The developed model of this study is also considered as an innovation in internal studies.

Final analysis of the results of Friedman test in relation to the comparison of effective components in evaluating the performance of entrepreneurial companies of industrial holdings indicates that there is a significant difference between the effective components in evaluating the performance of entrepreneurial companies of industrial holdings, so that the component of "financial and shareholders" has the most impact and R&D component has the least impact on the design of performance evaluation model of entrepreneurial companies of industrial holdings with sales and operation planning approach. In this regard, three components of technology and information, continuous internal improvement, and R&D are considered as new findings of the research and the technology and information component was ranked third. It indicates the importance of technology and information as a new component to evaluate the performance of the organization. Shareholders, markets and customers, like similar evaluation models, were rank first and second, respectively.

### Research Limitations and Recommendations for Future Research

One of the most important limitations of this study is the lack of a great number of internal studies in the area of sales and operation planning. It is recommended that more comprehensive research be conducted in the area of sales and operation planning. Thus, in future studies, the following topics can be considered:

- a. Conducting similar research using other mathematical modeling methods
- B. Validation of the above model using other methods
- J. Modeling the role of SOP in the supply chain

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