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# Investigation the Relationship Between the Components of Sales and Operation Planning and the Evaluating the Performance of Entrepreneurial Industrial Holding Companies



**Abstract:** - The intensification of global competition in an environment that is constantly changing the need for appropriate responses. How of manufacturing companies the industry has doubled. The importance of planning means thinking ahead and anticipating future possible solutions. Planned sale of the company must be carefully planned and coordinated within the framework of it. 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. Research had different methods to do. First, solve the problems that currently exist in the workplace and second, to add to the collection of human knowledge in a particular area that is of interest. Meanwhile correlation main objective is to determine if there is a relationship between two or more variables, and if there is what the extent of it is. Sales and operations planning in the descriptive indicators, it was found that almost all indicators, are above average.

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

## 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

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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. Performance measurement are increased to control the organization's strategies to identify the extent of achieving organization goals and programs and responding to the organization's stakeholders. Performance evaluation plays a vital role in organizations success. Comprehensive performance awareness is a crucial factor for organizational managers to make decisions. It's said that what can be measured is manageable and if nothing can be measured, it cannot be managed (Sultani Ali Abad et al., 2019, 1). In the large Spare parts holding companies called "entrepreneur firms" have been created whose task is innovation and entrepreneurship and directed all entrepreneurship projects to implement and commercialize. 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.

## LITERATURE REVIEW

### **Performance evaluation**

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: Etzioni 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

### **Sales and operation planning**

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). rofit.

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.

row	Initial code	source	Secondary theme	Primary theme
1	Obtaining the satisfaction of shareholders financially	Extraction from and library studies and sources		Finance and shareholders
2	Reviewing, analyzing and control of financial and profitability indicators	Extraction from and library studies and sources		
3	Paying attention to financial and economic approaches and processes and their correct implementation	Extraction from semantic units (semi-structured interviews)		
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)		Markets and customers
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		
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 recognition	Extraction from semantic units (semi-structured interviews)	Technology 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		Research and Development
18	Focus on providing a world-class product	Extraction from and library studies and sources		
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	development	
23	Product interest in the market	Extraction from and library studies and sources		
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	Extraction from semantic units		

	technologies	(semi-structured interviews)		
47	The cost of electronic transactions	Extraction from and library studies and sources		Technology and information
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)		Continuous internal improvement
52	Focus on low-cost improvements	Extraction from and library studies and sources		
53	Status of identifying, documenting and evaluating improvements	Extraction from semantic units (semi-structured interviews)		
54	Continuous improvement process in the organization	Extraction from and library studies and sources		
55	Utilization of KPI indicators in evaluating organizational improvements	Extraction from and library studies and sources		

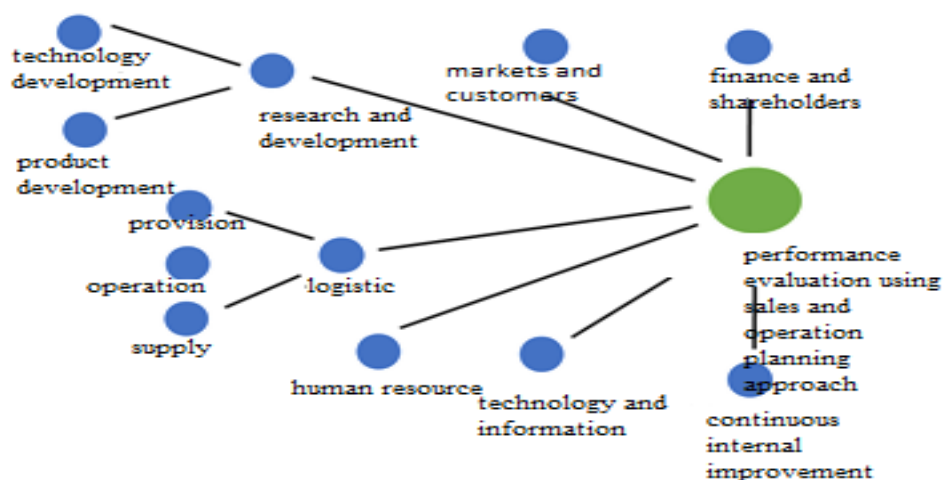
#### QUALITATIVE METHOD

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 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. 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).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. 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. 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)

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**



## RESEARCH METHODOLOGY

The present study is an applied research according to its purpose. It is a field study from the perspective of the environment. Research can be classified according to time in two categories, Length and Cross section which is a cross-sectional study. The present study is a combined approach or combined approach through a combination of qualitative and quantitative methods. The combined research includes the collection and analysis of quantitative and qualitative data. Quantitative data are obtained through a questionnaire-like package tool. In return, the qualitative data are formed from the reactivity information. The researcher first, in qualitative view, reviewed the subject of the research with the limited participants and then, based on qualitative findings, is considered in the case of the construction of the instrument. Therefore, the main purpose of collecting qualitative data, the concepts of exploring, and the factors of the company and the relationship between the factors of the company and the company. It's been a little while. According to the explanations presented, this

study is a practical and focused research with integrated approach. In qualitative approach, theme analysis method and quantitative approach has been used. This descriptive method is applied.

#### STATISTICAL SOCIETY AND SAMPLE RESEARCH

The population studied in the qualitative section includes senior business managers and investors in large car parts holdings with independent entrepreneurs and innovator companies. All of them have related academic degrees, as do academic specialists from the faculties of industrial management and engineering at Qazvin Azad University, South Tehran Azad University, and Boin Zahra Engineering University.

#### 2-2-3) Statistical and sample research in quantitative section

The statistical population of the quantitative phase consisted of all four active holding managers in the field of auto parts and about 153 people. Using the Cochran formula, the sample volume will be calculated as follows. In the above-n statistical sample size n, n is the number of statistical population.

$$n = \frac{Nt^2 pq}{Nd^2 + t^2 pq}$$

Therefore, the size of the statistical sample studied in the society, according to the mentioned formula, will be equal to;

$$n = \frac{153 \times 1.96^2 \times .50 \times .50}{153 \times .05^2 + 1.96^2 \times .50 \times .50} \cong 109$$

It should be mentioned that a small part of the sample is selected based on criteria and criteria. Thus, it can be said that the sampling method in the quantitative part of the research is also targeted.

#### VALIDITY AND RELIABILITY MEASURING TOOLS

To calculate the validity and reliability of the measurement instrument, the following methods were used:

##### A Review of Validity in the Qualitative Section

To ensure the validity of the qualitative part of the research and to ensure the accuracy of the findings from the researcher's perspective, valuable comments from professors familiar with this field and organizational expert who were knowledgeable in the field were used

##### content validity check

The main purpose of this study is to design and explain the performance evaluation model of industrial holding companies using planning and sales approach. The present study has tried to evaluate the performance of TB EYN entrepreneur firms and to validate the model based on the literature, background of studies and interviews with academic managers and experts. In the last step, in order to validate the above criteria and components, in the view of five experts of academia and performance of business, 7 main components and 55 criteria have been formulated for holistic consideration of the model. They are asked to identify the issues regarding "relevance and necessity" in the field of evaluating the performance of industrial holding companies, with regard to planning and sales approach. In fact, the researcher in this section has tried to evaluate the content validity of the components and criteria related to the performance evaluation of the entrepreneur companies.

As we can see, content validity index (CVR) value for all parameters and criteria is greater than 0.99. Also content validity index (CVI) value for all components and criteria is greater than 0.79. Therefore, in general, all of the components and criteria have content validity.

□ Validity checks in quantitative sectors

To ensure validity of interview questions, opinions of the mentors and professors were used. In order to assess validity of the researcher-made questionnaire, the Content Validity (Face validity) and Construct Validity (Confirmatory Factor Analysis) methods were used. Then, in the content validity method, first, a preliminary questionnaire was developed and the formal validity of the questionnaire was estimated by consulting and using the opinions of the relevant persons, whether professors, advisers, or several subject experts. In the structural validity method, factor analysis was used to determine the validity of the questionnaire, using Lisrel-based covariance structural equation modeling software. Furthermore, the validity of the questioner was measured by the structure and interaction between theoretical structures.

□ Validity Check of Research Statements

To assess the components of the study, the effect of factor loading on all the components of the components is greater than 0.4, and we can say that all the factor loadings are desirable.

RELIABILITY ANALYSIS

In this study, to evaluate reliability of measures (spectra) used Cronbach's alpha coefficient in SPSS software, the results are as follows:

Indicator	Cronbach's alpha coefficients
Finance and shareholders	725.0
markets and customers	804.0
Research and Development	860.0
Manpower	740.0
logistic	936.0
technology and information	777.0
Continuous internal improvement	710.0

As shown in the above table, Cronbach's alpha coefficient and combined reliability coefficient are 0.961 and for all research concepts greater than 0.70. This shows a suitable internal correlation between variables to measure the considered concepts. Thus, it can be said that the research instrument can be used for measuring the required reliability and reliability.

DATA ANALYSIS

□ Qualitative part (inference findings)

In the qualitative part, the data were collected through thematic analysis, and in the quantitative part (survey), after collecting the data, the data were entered in SPSSv.25 statistical software. Then, the research purposes were processed and analyzed based on questions. In the next stage, the results of the research in two parts were described and then analyzed. In the descriptive results section, variables and features of the research sample were distributed and made. The results and findings were displayed in the form of a one-dimensional table with a variety of central (average), tends to scatter (standard deviation and range of changes). After presenting the descriptive findings of demographic variables, the basic concepts (indicators related to performance evaluation of industrial entrepreneur firms) were presented. In the analytic (inferential) section of this paper, an exploratory factor analysis is first conducted, using Kolmogorov Smirnov Test, to verify the normality of the research variables' data distribution. In order to determine the importance of the research components, using the data from quantitative segment, from the hope of math, variance, and coefficient of change were used. Then, the relationship between the independent and dependent variables of Pearson correlation analysis was used. At the end, the Lisrel-based covariance-based structural equation modeling was carried out to design an evaluation



model of the performance of the industrial holding companies with sales planning and operation approach. By this way, the model was evaluated and regressions have determined if the model has fit and fit and finally the performance analysis method is analyzed

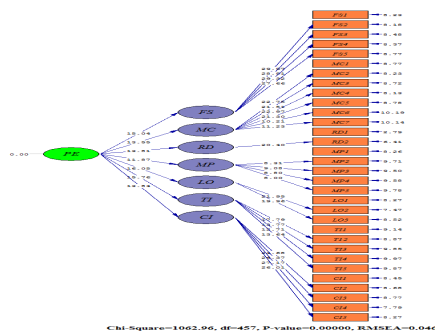


Fig.2.Performance model of entrepreneurial companies of industrial holdings (in a significant state)

PEARSON CORRELATION MATRIX BETWEEN RESEARCH VARIABLES

In this part, with the help of Pearson's correlation and considering the necessary statistical considerations, the relationship between the research variables has been examined.

7	6	5	4	3	2	1	متغير
						1	Finance and shareholders
					1	0.437**	markets and customers
			1	0.482**	0.541**		Research and development
		1	0.545**	0.466**	0.455**		Human resource
	1	0.292**	0.479**	0.511**	0.368**	0.362**	logistic
1	0.195*	0.393**	0.454	0.447	0.348	0.342*	Information Technology
							Internal continues improvement

\*Significant at the 0.05 error level

\*\*Significant at the 0.01 error level

Significant correlation coefficients, if it is in the distance (0-±0.3), the intensity of the relationship is weak, if it is in the distance (±0.3-±0.6), the intensity of the relationship is moderate, and if it is in the distance (±0.6-±1), the intensity of the relationship is strong.

It should be noted that the direction of the relationship is determined by the sign of the correlation coefficient, so that if the correlation coefficient between two variables is positive, the relationship between the two variables is direct and positive, and if it is negative, the relationship between the two variables is negative and inverse. Regarding the above correlation matrix, it can be said that there is a direct and significant relationship between most of the research variables, in other words, when one increases, the other also increases. The final results of the above matrix indicate that the strongest direct correlation is between the components of "finance and shareholders and research and development" (r = 0.541)

and weakest direct correlation is between the components of "logistics and human resources" ( $r = 0.348$ ).

### CONCLUSIONS AND RECOMMENDATIONS

Sales and operations planning in the descriptive indicators, it was found that almost all indicators are above average. On the results of the relationship between chain components SOP and evaluate the performance of the organization, we concluded that the link between components of SOP and assess the performance of the organization there. Statistical analysis of the study showed that using correlation test was confirmed, So that the independent research variables (sales and operations planning cycle component) and the dependent variable (performance evaluation) there was a significant relationship.

### SIDE SUGGESTIONS

Practical suggestions to managers Here are some suggestions for using indicators of sales and operations planning, is presented to managers.

- Managers should implement a strategic planning process and business plan as a serious and continuous follow-up of the organization, and all the movements made by an organization's strategic plan.
- Managers should study and analyze the industry and market forecast analysis of sales are done and sales planning on the basis of information obtained for administrative units of the organization. The system will continually monitor and update the status of the market.
- All issues related to planning, sales, based on different indicators in the monitor and the meetings that will be established for this purpose, controls and corrective actions to define and compare the actual performance with a defined budget.
- According to the plans announced by the sales department, with the help of the defined resources the organization, the production planning is based on the above programs.
- All of the above meetings of the monitoring of production will be established for this purpose, have been raised and studied and controlled, and the realization of the production lines and workforce productivity, waste and re-work and corrective measures to compensate for stoppages and extraction retardation is defined.
- In this regard, the directors recommended encouraging creative and innovative staff, area need to review and reform existing methods provide.
- Human resource managers will need to consider as the most important asset of the organization and did not miss it.
- providing proper grounds for the recruitment of young managers and use them to improve the performance of the organization is important. Suggestions for further research

Based on the results obtained and gaps in the studies, the researchers recommended that:

- Relationship between sales and operations planning and evaluation of the performance of government agencies examined.
- Barriers and limitations of sales and operations planning in developing countries and countries compared and considered the first level.
- Evaluation of sales and operations planning scenario planning and its role in evaluating the performance of the organization should be examined

### REFERENCES

- [1] Adel Ali, to evaluate the performance of the police in maintaining order and security in Bam, Iran, Thesis Faculty of Law, 2005

- [2] Soltani Aliabad, Mojgan and Abbasi, Reza and Safari, Saeed, 2019, Identification of Organizational Entrepreneurship Performance Assessment Indicators, *Technology Growth Quarterly*, Year, No. 46, p. 61-67
- [3] Khadimi, Yousef and Sattari, Sadruddin, 1400, Evaluation and Prioritization of Types of Engagement and Participation in Electronic Learning Environment Using Analytic Hierarchy Technique (AHP), *Quarterly Journal of Information and Communication Technology in Educational Sciences*, The Eleventh Year, The Third Issue, P. 87-107
- [4] Fleischmann, B., Meyr, H., & Wagner, M., 2015, *Advanced planning Supply chain management and advanced planning*, Berlin Heidelberg, PP:101-102
- [5] Braun, V. & Clarke, V. (2006). Using the Matic analysis in psychology. *Qualitative Research in psychology*, 3(2), 77-101, <http://dx.doi.org/10.1191/1478088706qp063oa>
- [6] Creswell, John (2010). *Methods of Mixed Research*, Translated by Alireza Kianmanesh and Javid Sarai, Third Edition, Ayizh Publications, 73-89
- [7] tolaei, Rohollah (2009). New reviews to evaluate organizational performance, *Monthly Journal of Police Human Development*, Fourth Year, No. 12, Institute of Humanities and Cultural Studies
- [8] Tiping, J. D. K. & Deshmukh, S.G. (2006). Balanced Scorecard for Performance Evaluation of R&D Organization: A Conceptual Model. *Journal of Scientific & Industrial Research*, 65, 879-886. <http://nopr.niscpr.res.in/handle/123456789/4952>
- [9] Khatami, S.M. (2015). Review and ranking of Bank Melli performance evaluation indicators using balanced scorecard model and fuzzy AHP with emphasis on financial indicators. *Management and Accounting Research Monthly Journal*, (14), 101-109, <https://civilica.com/doc/450179>
- [10] Alexandre Veronese Bentes, Jorge Carneiro, Jorge Ferreira da Silva, Herbert Kimura (2011), Multidimensional assessment of organizational performance: Integrating BSC and AHP, *Journal of Business Research*, 65, pp. 1790-1799, <https://doi.org/10.1016/j.jbusres.2011.10.039>
- [11] Mostofiyanzadeh, Mohammad Hossein (2018). Presenting a Performance Evaluation Model Using Balanced Scorecard and Interpretive Structural Modeling Case Study: Shahr Bank, *National Conference on Management, Ethics and Business*, <https://civilica.com/doc/918429/>