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THE EFFECT OF FINANCIAL INTELLIGENCE ON THE FOUR FUNCTIONS OF OPERATIONAL MANAGERS AND THE FINANCIAL PERFORMANCE OF OIL COMPANY

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ABSTRACT

In recent years, performance appraisal has become one of the most important concepts of management and has become embedded in the culture of leading organizations, which, while promoting accountability, determines the achievement of goals and programs of each organization. In order to achieve the goals and plans of their organization as well as growth and survival in today's turbulent environment need special features that financial intelligence is one of the components that modern managers must have to gain deep knowledge of all environmental factors to make the organization smart. As a result, it can better manage the organization under its leadership in a turbulent and competitive world and achieve the main goal of organizations, namely to improve performance and achieve a level of excellence and sustainability in order to maintain survival, growth, profitability and meet the needs of society To be .Therefore, the purpose of this study is to investigate the effect of financial intelligence on the performance of the four functions of operational managers and financial performance of the Iranian Oil Refining and Distribution Company. The present study is applied in terms of purpose, descriptive-survey in nature and data collection method through library and field. The statistical population of the present study was 66 operational managers as a sample using Cochran's formula and simple random sampling method. In order to achieve the objectives of the research, a standardized questionnaire of 56 questions was used, the validity of which in previous studies using Content validity and factor analysis were confirmed and its reliability was calculated using Cronbach's alpha test; And for data analysis using spss, pls software in two levels of descriptive and inferential analysis has been used. The results also showed that financial intelligence affects the four functions of operational managers and financial performance of the National Company for Refining and Distribution of Petroleum Products, so financial intelligence is a key factor in financial success of the organization and can make a significant contribution to the development of financial resources and assets in each Have a managerial position and managers can use financial intelligence to help their organization succeed.

INTRODUCTION

The increasing complexity of society, the advancement of science, technology, and consequently the needs and expansion of organizations require the use of skilled and efficient managers in the effective management of organizations because it reflects the reasonable performance of managers that leads to survival and growth of the organization. (Iran Nejad Parizi, Mehdi and Parviz Sasan Gohar; 2009). Also, given that one of the characteristics of financial intelligence is to acquire valuable assets that will also generate wealth for us, it makes those who are literate usually more successful in identifying economic opportunities as well as financial threats and risks. And so they can make a fortune by optimizing their efforts

The vast majority of managers' decisions have direct financial effects or consequences or indirectly affect the financial condition of the institution. (Davood Mesgarian Haghighi, 2010) (Hansen R., 2015) Managers make decisions every day that involve the use of financial intelligence, and these decisions affect the company's financial performance and affect the company's performance.

Financial intelligence includes information and experiences that help you bring cash flow into the organization cycle, wise risks, long-term investment plans, targeted decisions, and revenue growth. Get it right. Your success in the field is guaranteed, so no matter how much this level of intelligence is involved in decisions, it affects the final performance of the company. Also, financial intelligence is not an internal skill but a set of learned skills that can Expand in all its dimensions. Financial intelligence can not only be learned theoretically but also requires the practice and application of concepts in the real world (Berman and Knight, 2013)

If we do not strengthen our financial intelligence, the problems will get worse day by day and the situation will become more difficult day by day; Informed and talented managers guarantee job security for themselves, shareholders, employees and all stakeholders of the organization, which results in economic security, psychological security and, consequently, social welfare, if decisions are made in economic markets. Properly covered, it will withstand a great deal of adverse conditions, including a stable economy and, ultimately, prosperity; The most important changes and complexity of today's markets is one of the important reasons for managers' financial intelligence (Raees Abadi, 2013). Meanwhile, operational managers can be focused and researched as an important part that are effective in the production process and can change the company's financial situation.

Also in the field of decisions of operational managers, it is necessary to know that many decisions of operational managers have financial aspects, including daily transactions, pricing and cost planning, etc., in all of which the need for financial intelligence of managers and financial performance is felt. Affects. (Ahmad Alafifi 2019) But one of the most important functions of managers in any organization is to address the four important effects that managers in each organizational category must address these four common tasks: planning, organizing, leading and controlling, depending on the importance of each of these tasks. They are known as senior or operational manager. Senior executives focus on long-term planning to achieve organizational goals and operational managers focus on short-term planning. In general, all managers strive to achieve the goals of the organization.

In the management literature, the main tasks of the manager include planning, organizing, leading, supervising and controlling, and decision-making is the basis and foundation of all the duties of managers. (Ramezani, 2007) In fact, today, operations management means a set of activities and actions that include planning, organizing, managing and controlling the operations of the organization, this definition shows the importance of operations management. Effective handling and management of operations can be very beneficial and effective, and on the contrary, weakness and failure in this area will become a major disaster for the company.

Since one of the most important steps in measuring the quality and prosperity of a company is its finances, then the company's financial performance is a very important aspect in society and for investors and as an effective element in the economic cycle, it is vital that it should be addressed. Since the main goal of all businesses is profitability, we must look for ways to become more profitable. One of the factors of profitability is the discussion of financial intelligence, which states how to earn money and how to increase and how to spend and can be used It is used as a measure of managers' competence to be appointed to the relevant organizational position, and by selecting more qualified people, we reduce the risk of bankruptcy and wrong decisions, and keep the organization in a stable and secure position, so it seeks to achieve the following goals: Including: Determining the effect of financial intelligence on the financial performance of the oil refining and distribution company and also determining the effect of financial intelligence on the performance of the four functions of operational managers in the study area.

Therefore, the main question of the research is whether financial intelligence affects the performance of the four functions of managers and the financial performance of the refining and distribution company of petroleum products?

According to the purpose of research, the hypotheses and research model are as follows

Main hypotheses

1- Financial intelligence of operational managers affects the financial performance of the refining and distribution company of petroleum products

2- Financial intelligence of operational managers affects the four main functions of operational managers of oil products refining and distribution company

Sub-hypothesis

1- Financial intelligence of operational managers affects the activity of organizing operational managers of oil products refining and distribution company

2- Financial intelligence of operational managers affects the leadership activity of operational managers of oil products refining and distribution company

3- The financial intelligence of the operational managers affects the planning activity of the operational managers of the oil products refining and distribution company.

4- The financial intelligence of the operational managers affects the control activity of the operational managers of the oil products refining and distribution company

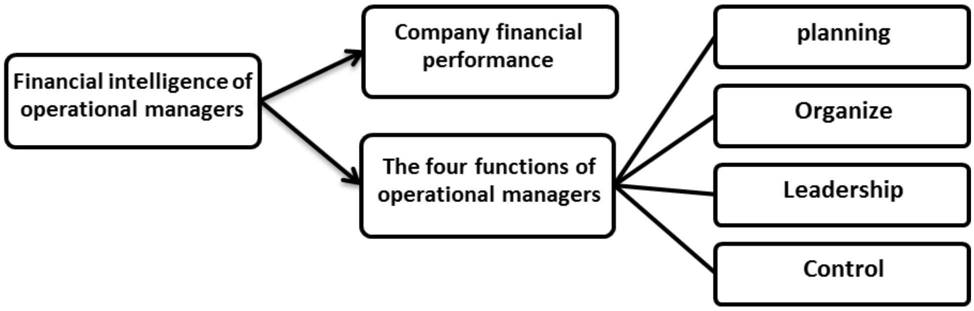

Figure 1: A combined conceptual model made by a researcher and taken from Muharram Nejad and Shokrzadeh 2018

THEORETICAL FOUNDATIONS:

Management

In recent years, performance appraisal has become one of the most important concepts of management and has become embedded in the culture of leading organizations, which, while promoting accountability, determines the achievement of goals and programs of each organization, so in today's complex world Achieving the goals and programs of your organization as well as growth and survival in today's turbulent environment requires special features that financial intelligence is one of the components that managers must have to gain deep knowledge of all environmental factors to make the organization smart. And as a result be better able to manage the organization under their leadership in a turbulent and competitive world.

The history of management dates back to the beginning of human civilization, but its modern concept was introduced in the mid-19th century. Management has used various sciences such as psychology, technology and social sciences to prove itself, as well as conflicts between skills, performance, experience and efficiency at different levels of psychology. , Has eliminated the technical and social sciences and has established agreement between these levels

Thus, management is an interdisciplinary field that is composed of a combination of many elements of psychology, technical and social sciences and is used in almost all aspects of life and levels (organization, government, family and industry); Management is also defined as the process of planning, organizing, leading, controlling the members of the organization to achieve the set goals (Tasik, Tabik, Tasico, Metic 2011)

The four main tasks of each manager are as follows:

1- Planning: having a written plan to advance activities

2- Organizing: Organizing people and activities in order to facilitate the affairs of the organization

3- Leadership: guiding and leading employees to achieve goals and prevent deviation from the organization's policy

4- Control: Control of ongoing activities and follow-up activities According to the level in which the manager is, the amount of these four factors changes for him.

The managers of the organization, according to the role they play, each have four duties in proportion; Top managers are in charge of most long-term organization and planning, middle managers are in charge of organizing and leading, and operational managers are in charge of leading and controlling. But different levels of management do not mean that they do not have the task of doing other things, but it is one of their tasks, but they look at it more generally.

As a result, management is a technique of better mobilization and better organization and better control of human resources (Robbins 2008, p. 130)

There is a serious disagreement among management experts in presenting a single definition of management, and each of them has emphasized certain aspects of management, and despite the differences that seem to exist, they all agree on one point, and that is this. That management is the achievement of goals

Managers are categorized in different organizations based on organizational level, organizational position and organizational title. The formal organization is usually formed from the share of the management area and an operation execution area as follows: (Saljuqi, 2006).

This level of management usually consists of a small group of managers; They are responsible for the general management of organizations. They prepare and approve general policies, macro plans, plans and strategic plans of the organization and apply supervision and coordination to the entire organization (Rezaian, 2011).

Middle managers are a lower level than top managers and report directly to top management and form a bridge between top management and the organization's operational management. The middle management is the management of the supervisors. They translate the strategies and policies provided by managers into specific goals and programs and provide them to operational managers; These managers spend most of their time attending meetings and preparing reports. These managers plan for the medium term and prepare more comprehensive plans for the comments of senior managers (Srizadi, 2007).

In terms of importance, the first point that discusses the pathology of the production management system and human resource management is supervision. Supervisors can greatly increase the role of the organization's damage or reduce immunity from harm (Shabgo Monsef, 2004).

Operational managers are managers who are directly involved in the production process and decisions at this level are of particular importance; Operational manager or supervisor refers to someone who directs and manages others and in the organization, unlike other management levels, manages non-managers, so the closest management level to execution and operations in doing work and activities in the workshop with a working circle And reports to the middle manager and it can be said that the success or failure of the first line supervisors of each organization's units is directly related to the overall efficiency and productivity of that organization

In some sources, supervisors were named as agents of change; Because if supervisors have the necessary knowledge and skills, they will be able to manage change and implement change goals at the operational levels and the base of the organizational pyramid.

Financial intelligence

Alfred Binet and Theodore Simon developed the first objective test of intelligence, and in their view, intelligence is the judgment of correct understanding and reasoning. Also, according to Louise Terman: Intelligence means the ability to solve abstract problems.

The power of adaptation to the environment is another definition of intelligence (Kadivar 2014, p. 61)

Hepter defined intelligence as: Intelligence is the measure of using one's experiences to quickly solve problems and anticipate new problems. According to him, intelligence is the ability to solve problems; In general, people with higher IQs better solve problems and make better decisions (Onill and Abedi, 1996)

Berman, Knight, & Case (2013) identify the three constituents of financial intelligence as follows:

1- Understanding the basics: Having financial intelligence requires understanding the basics of financial measurement including profit and loss statement, balance sheet and cash flow statement and requires knowledge of the difference between cash and profit and knowledge of how a balance sheet is balanced.

2- Artistic understanding: Although the field of behavioral finance is considered as science; It is not unlucky in terms of art. This discipline relies on rules, estimates, and hypotheses. Financial intelligence ensures that people are able to recognize the artistic aspects of finance on numbers and know how to apply them in different ways, with different results.

3- Analytical understanding: Financial intelligence includes the ability to analyze financial figures in depth; This includes the ability to calculate profitability metrics, leverage, and liquidity and efficiency ratios.

For the first time, Kiyosaki articulates the idea and concept of "financial intelligence" and offers an interesting and enlightening division. According to Kiyosaki, financial intelligence consists of five components:

Financial Intelligence No. 1: Make More Money.

Financial Intelligence No. 2: Protecting Money.

Financial Intelligence No 3: Budgeting and Planning for Money.

Financial Intelligence No. 4: Using Money as a Lever Tool.

Financial Intelligence No. 5: Promoting Financial Information.

Financial intelligence is not an internal skill; Rather, it is a set of acquired skills that can be expanded in all its dimensions. Financial intelligence cannot be taught only theoretically; Rather, it requires training, practice, and application of concepts in the real world (Berman et al., 2013, 131).

In foreign research, Losardi (2009) found that financial intelligence influences financial decisions, thereby affecting asset structure or debt management. Also (Ronald and Grabel 2010, 61) found that the more financial intelligence, wealth and financial skills, the more people are willing to take risks.

Given today's global challenges, one of the needs of the organization is to select manpower that can respond appropriately to the challenges and be able to keep up to date with these challenges. In the field of finance, due to the economic conditions, big decisions of a country are always a challenge, so to face the existing challenges, managers with moderate financial literacy in the organization should be selected.

The most important reasons for the financial literacy of managers in the country are the following: Given the current situation, the competitiveness of markets and, most importantly, the implementation of Article 44 of the Constitution and the privatization of enterprises requires people to work in management positions. In addition to the management member, also have financial information; Well-informed and talented financial literacy managers ensure for themselves, shareholders, employees and all stakeholders of the job security organization that results in economic security, psychological security and consequently social welfare. If the right decisions are made in economic markets, it will lead to the continuation of market life, a stable economy and ultimately prosperity.

Financial performance of the organization

Evaluating business performance is one of the most important management agendas; Because the key to achieving continuous improvement is the ability to continuously evaluate and measure the performance of the organization. Many organizations have also realized the importance of continuous performance appraisal and use a variety of performance appraisal systems in the organization (Fernandez et al., 2006).

The success of any company's strategies is reflected in the performance of that company. The performance of a company is the degree of success of a company in creating value for different parts of the market; Finally, the performance of the company is determined based on the achievement of business goals, through different units of the company, and companies that perform well create value over time, and this does not happen in companies that perform poorly. To measure organizational performance, while paying attention to tangible economic results such as rate of return on investment and increase in profit margins and such tools, the level of creativity and innovation as well as increasing the level of organizational knowledge must be measured.

In Brom Rach's definition, these two features can be clearly seen. He believes that performance means both behaviors and outcomes. Behaviors arise from the performer and transform performance from an abstract concept into action. Behaviors are not just tools for results, they are a kind of result in itself (the product of the physical and mental effort exerted on tasks) and can be judged separately from the results.

This definition of performance leads to the conclusion that both inputs (behaviors) and outputs (outputs) should be considered in conjunction with performance management.

The main goal of firms is to maintain and increase the wealth of shareholders, and value creation for firms is the only way to achieve this goal. Therefore, creating profit or economic value added that increases the value of stocks in the market and improves the wealth of shareholders, can be considered as a factor in creating value for firms, but the most important purpose of applying financial performance in the organization is financial system discipline. , In order to improve efficiency and profitability. As a result, proper financial performance refers to the process of profitability in the organization. In other words, the ultimate goal of financial performance is to reduce costs and profitability in the organization in order to promote added value in the organization.

One of the goals of the organization's financial performance is to optimize the organization's financial operations and control costs and risk in the organization (Pillay et al. 2003)

The purpose of financial performance is to increase the value of the company and since the value of the company is crystallized in the stock price, it can be said that the purpose of financial performance is to increase the wealth of shareholders and the value of the company is affected by two factors: 1- Return 2- Risk (Colgate et al. , 1998)

The degree to which a company achieves the financial goals of shareholders in order to increase their wealth is called financial performance (Dastgir and Arab Yar Mohammadi, 2011). Financial performance is determined by two indicators of liquidity and profitability. Economic and liquidity is a sign of survival of the enterprise (Agriculture 2007).

(Stewart 15, 1991), (Azizi 2012), they presented their performance appraisal model based on three components (value management, risk control and cost control)

Value management: is a management model in a value approach that emphasizes on motivating people, developing skills and promoting synergy and innovation with the aim of maximizing the overall performance of the organization. Value management at the organizational level relies on a value-based organizational culture that values Considers stakeholders interests and customer satisfaction (internal / external) together.

Risk control: also includes the steps of risk management planning, risk monitoring planning and corrective actions.

Cost control: is a subsystem of cost management and control system that this subsystem performs control activities in both planning and operational processes (Khabarizad, 2011).

Managers of operational level of oil products refining and distribution company

Production coordination and supervision management as one of the basic pillars of the National Iranian Oil Products Refining and Distribution Company, has been established in order to better organize oil refining operations and production of petroleum products, with the aim of continuous production and increasing productivity.

The main task of this management is to coordinate and supervise the refining of crude oil and production of various petroleum products, including main products including liquefied petroleum gas, gasoline, kerosene, gas oil and furnace oil, and special products including base oils, light and heavy jet fuels, sulfur. , Solvents, bitumen feed and .4.2 in accordance with current standards.

This management has excellent supervision over the activities of oil refining companies in four areas of production coordination and control affairs, production engineering affairs, supervision of implementation and launch of non-industrial production plans and operations.

The responsibility of directing the operations of receiving, storing and transferring major and special petroleum products, targeting and planning the distribution system of petroleum products, as the end point of the central and macro goals of the company, in order to satisfy compatriots across the country is the responsibility of this Is management

Policy-making, planning, follow-up and supervision of all measures related to reconstruction, strategic supervision of safe refueling operations for domestic and foreign aircraft in 50 airports of the country, supervision of observance of safety and occupational health principles in all warehouses and facilities of the company and supervision On the implementation of management systems in the regions is another task of this management

background research

Gholam-Ali Kargar, Sara Kashgar, Alireza Eftekhari In the winter of 2019, the study of the relationship between financial intelligence and the development of financial resources and assets of managers of bodybuilding clubs in Tehran. There is a significant relationship and also the results of independent t-test showed that financial intelligence is not significantly different between men and women, so financial intelligence is a key factor in financial success of individuals and can play a major role in the development of financial resources and assets of managers. They can use financial intelligence to help their organization succeed

Sahar Khadem Al-Hosseini, Zahra Amir Hosseini in the winter of 2019 addressed the issue of independence, decision-making authority of managers and financial performance and the results show that there is a significant and direct relationship between management ability and financial performance (Q Tobin and return on assets) of companies Is. Also, the higher the power of managers of companies, the more managerial ability they increase the performance of companies. In addition, the higher the oversight, the stronger the positive relationship between management ability and return on assets, as well as the positive relationship between management ability and cytobin.

Moharramnejad, Mostafa and Morteza Shokrzadeh 2018 Relationship between financial intelligence and financial performance (Case study: Mako Free Zone Organization) The results of data analysis using SPSS and EVIEWS software show that between financial intelligence and financial performance of free zone employees Mako There is a significant relationship

Ahmed Alafifi, Allam Hamdan, Abdalmuttaleb Al-Sartawi (2019) worked on the impact of financial literacy on financial operational decision makers at MSMES, and the literature has clearly shown that financial literacy is an essential element of financial well-being. In addition, financial literacy opens a relatively simple path for policy design and implementation (Karakorum-Ozdemir et al., 2019). In accordance with the main purpose of the present study, a financial literacy model has been developed to coordinate financial decisions and to improve the correct decision in MSMES in Bahrain, the level of financial literacy is needed.

Yanping Liu, Shamim Akhtar (2018) on the importance of SME managers and financial literacy; Is Financial Literacy Really Important? By examining the level of financial literacy of small and medium business owners (SMES) of business owners and its impact on firm performance, these findings have a full impact of financial attitude of firm owners, financial attitude, financial knowledge and financial awareness on financial literacy adjustment to increase firm performance. is showing. The results show that the financial awareness and financial knowledge of SME managers is clearly not a condition for SME performance, but the tactics of entrepreneurs in decision-making and communication with financial attitude are in conflict with financial literacy. The findings will be invaluable to SME owners, investors and service providers.

Ali Bayrakdaroğlua, Fırat Botan Şanb, (2014), introduced financial literacy training as a tool for strategic management among small and medium-sized businesses operating in Turkey. This article describes the manager's ability to use financial market tools in small businesses and Medium pays in Turkey. According to the findings of the study, the level of financial literacy of the manager increases with financial education, which is a strategic management decision in conclusion. It has been found that the level of financial literacy of the managers who participated in the study is higher compared to other literature studies. In addition, managers with higher levels of financial literacy show greater participation in financial markets by reducing information constraints. Another behavioral effect of market participation is lack of self-confidence, which is very low among company executives in the study. This may be the reality of limited market participation among SMB managers. Financial education is also related to the level of confidence of managers.

RESEARCH METHODS

The type of research is descriptive-survey in terms of method because it examines the effect of financial intelligence on the performance of the four functions of managers and the financial performance of the refining and distribution company of petroleum products in order to provide appropriate solutions. In fact, the researcher has no possibility of manipulating the independent variable and in terms of purpose, is part of applied research; Because its results can be used to improve financial performance in organizations and the competence and talent of managers and in terms of collecting information from both library methods to collect theories and theories related to the field due to the use of questionnaire tools to assess We will use the statistical community

Statistical Society

The statistical population of this study is the operational managers of the National Company for Refining and Distribution of Iranian Petroleum Products.

$$N = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N}\left(\frac{z^2 pq}{d^2} - 1\right)}$$

N: Statistical community size ; n: Statistical sample size

In the above formula (N = 80), the probability (P = 0.5) and the values (1-P) equal to q will be equal to 0.5, and considering the error rate of 5%, the sample volume will be equal. Was with: n = 66

Data collection tools

Data collection methods can be divided into two categories: library information and field information that both methods were used in the present study. The library method has been used to collect theoretical backgrounds and theories related to the subject and related books, study Persian and Latin articles and dissertations in line with research, journals and reputable websites.

In the field of field collection, a standardized questionnaire has been used because the questionnaire, as one of the most common tools for collecting information in survey research, is a set of goal-oriented questions that use different scales, opinion , Assesses the perspective and insight of a respondent (Khaki, 2008).

The questionnaire of this research is a standardized questionnaire whose validity and reliability have been evaluated before, but its validity was re-evaluated and reaffirmed through confirmatory factor analysis; This questionnaire consists of 56 questions and 10 dimensions that have been prepared on the Likert scale and provided to the research sample for answering.

Validity of research tools

Validity is a term that refers to the goal that the test is designed to achieve. There are several methods for determining the validity of a measuring instrument, but all of them in some way indicate the validity of the content of the measuring instrument. Content validity is a type of validity that is commonly used to examine the components of a measurement tool. The content validity of a test is usually determined by experts in the subject (Sarmadi et al., 2011, 171). In this study, the questionnaire was used both through content validity and through factor analysis that the factor load for all indicators of the questionnaire is more than 0.5 and therefore it should be noted that the questionnaire had structural validity.

Reliability of research tools

One way to calculate reliability is to use Cronbach's formula. This method is used to calculate the internal consistency of measuring instruments such as questionnaires or tests that measure different characteristics. In such tools, the answer to each question can take different numerical values. The number obtained from this test is acceptable when it is between 1 and 0.7, which is stated in the reliability of this questionnaire in the table below in a variable.

To calculate the Cronbach's alpha coefficient, one must first calculate the variance of the scores of each subset of the questionnaire (or subtest) questions and the total variance. Then he calculated the value of alpha coefficient using the following formula.

$R_{\alpha} = \frac{J}{J-1}\left(1 - \frac{\sum SJ^2}{S^2}\right)$

J = number of sub-questions of questionnaire or test
SJ2= variance of sub-test JM
S2 = total variance of the test (Sarmadi et al., 2011, 169)

The following table briefly shows the variables used and the dimensions of the assessment in this questionnaire:

Reliability	Resources	questions	Dimensions	Variables	row
0.78	Khalid Azizi, 2012	7-1	Value management	Financial performance of the organization	1
		14-8	Risk control		
		21-15	Cost control		
0.85	Camille et al., 2014	27-22	Financial knowledge	Financial intelligence of managers	2
0.78	Camille et al., 2014	32-23	financial behavior		
0.85	Bayrakdaraoglu and Bhutan, 2014	36-33	Financial education		
0.98	Ahmad Reza Nasr et al	41-37	planning	The four functions of operational managers	3
		46-42	Organize		
		51-47	Leadership		
		56-52	Control (monitoring)		

Information analysis method

To obtain answers to research questions by testing hypotheses, the researcher divides the data into different sections. Research data alone does not provide answers to the questions and interpretation of the data is necessary. Interpreting means explaining and giving meaning to data. Explaining raw data is difficult and impossible, one must first analyze the data and then interpret it.

Two methods will be used to analyze the information:

A) Descriptive part: Descriptive method is used to better and more accurately describe the results of the work. In this section, the researcher first summarizes the collected data by preparing and setting the frequency distribution table and then displays them with the help of diagrams.

B) Inferential section: In this section, first the normality or abnormality of data distribution was investigated using Kolmogorov-

Smirnov test and then due to the non-normality of the structural equation test using $SPSS_{26}$ and PLS software will be used.

Structural equation modeling has so far been introduced by Donsell of data analysis methods .The first generation of structural equation modeling methods are covariance-based methods. The main purpose of these methods is model validation and to work with samples with AMOS, LISREL high volume is required, which a few years after the introduction of covariance-based method, due to weaknesses In this method, the second generation of structural equation methods that were component-oriented were introduced; The component-based methods, which were later renamed the partial least squares method, provided different methods for data analysis than the first generation. The most important software for this method is Smart PLS.

One of the reasons for the popularity and widespread use of the PLS method is the lack of need to use a large sample size in research. Whereas the previous methods (first generation) urgently needed a large number of samples (more than 200) for the correct implementation of structural equation models.

Small sample size research causes two major problems in structural equations (SEM) using first generation methods 1- Lack of convergence 2- Inappropriate solutions. That In the PLS method, researchers do not face the above two problems; PLS is insensitive to sample size to the point that even the number of samples can be less than the total number of research variables, and the next reason is the possibility of using it for abnormal data that researchers in some studies

RESEARCH RESULTS AND FINDINGS:

Descriptive Statistics

Demographic characteristics of the questionnaire respondents are presented according to the table below

Frequency percent	Frequency	Demographic characteristics	
82.2	51	Male	Gender
17.8	11	female	
4.8	3	Postgraduate	Education
38.7	24	Bachelor	
56.5	35	master	
6.5	4	between 21 and 30 years	Age
21.0	13	Between 31 and 40 years	
48.4	30	Between 41 and 50 years	
24.2	15	More than 51 years	
9.7	6	between 6 to 10 years	Working years
11.3	7	Between 11 and 15 years	

33.9	21	Between 16 and 20 years	
45.2	28	More than 21 years	

Inferential statistics:

In the present study, in order to test the hypotheses, partial least squares analysis has been used. Partial least squares analysis is a multivariate technique that estimates invisible latent variables through various indices and examines the path between these latent variables. Analysis based on at least partial squares does not need to assume normal data distribution and large sample size. Also, in cases where structures are measured by developmental indicators, partial least squares are a more appropriate method for data analysis. The reason for using the partial least squares method in this study is the abnormality of the distribution of variables. Two models are tested in Paylus models. The first model is the external model or measurement model that examines the validity and reliability of the questionnaire and for this purpose we use three important indicators: mean variance extracted (AVE), composite reliability (CR), factor load. The second model is the internal model or structural model that shows the relationship between the latent variables of the research. Using the internal model, research hypotheses can be examined.

Check the distribution status of variables:

In this part of the research, it is necessary to determine the normality of the distribution of variables. The single-sample Kolmogorov-Smirnov test compares the observed cumulative distribution function with the expected cumulative distribution function in a sequential variable. If the data have a normal distribution, parametric statistics can be used and if the data do not have a normal distribution, non-parametric statistics can be used. The following statistical hypotheses have been proposed to perform this test:

H_0: The data have a normal distribution

H_1: Data do not have a normal distribution.

If the significance level of the research variables (Sig) is greater than 0.05, the null hypothesis is confirmed and the claim that the distribution of the research variables is normal is accepted.

Table 1: Significance levels of Kolmogorov-Smirnov test for research variables

Normality status	Significance level (Sig)	Variable
Abnormal	0.000	Financial intelligence
Abnormal	0.010	Financial performance
Abnormal	0.025	The four functions of managers

According to Table 1, the significance levels of all variables are less than 0.05. Therefore, the research variables do not have a normal distribution.

Check the adequacy of the sample

In performing factor analysis, one must first make sure that the research data can be reduced to several hidden factors. For this purpose, two tests, KMO and Bartlett, are used. The KMO index examines the smallness of the partial correlation between variables and thus determines whether the variance of the research variables is affected by the common variance of some latent and fundamental factors.

Table 2 shows the KMO value, Bartlett statistic value, degree of freedom and sig Bartlett test sig. Since the value of KMO index is 0.769 (above 0.7), the number of samples is sufficient for factor analysis and path analysis with structural equation modeling. Also, the sig value of Bartlett test is less than 5%, which indicates that there is a significant relationship between the variables, and factor analysis is appropriate to identify the structural model.

Table 2: KMO index and Bartlett test to evaluate the adequacy of the sample

The significance level	Degrees of freedom	Bartlett test statistics	The amount of KMO
0.000	1540	3227.867	0.769

Path analysis model

In the methodology of structural equation modeling, it is first necessary for the resident to study the validity of the structure to determine that the selected markers for measuring their desired structures have the necessary accuracy. That is, are the questions correctly selected to measure the variables? Confirmatory factor analysis (CFA) is used for this purpose. In such a way that the factor load of each indicator with its structure has a significant t value at the error level of 5%, ie its value is outside the range of -96 and -1.96, also the factor load of each indicator with its structure is higher than 0.50 (in this case This variable has measured at least 25% of the variance of the latent variable), then this indicator has the accuracy necessary to measure that latent structure or attribute (Nanali and Bernstein, 1994).

For this purpose, confirmatory factor analysis was performed on the questionnaire items (Appendix 1). All questions have a factor load above 0.5 and significant values above 1.96 and accurately measure the variables predicted in the questionnaire. In the following, you can see the model for measuring research variables in two modes of significance and standard coefficients.

H0 = Significant values are not more than 1.96.

H1 = Significant values are greater than 1.96.

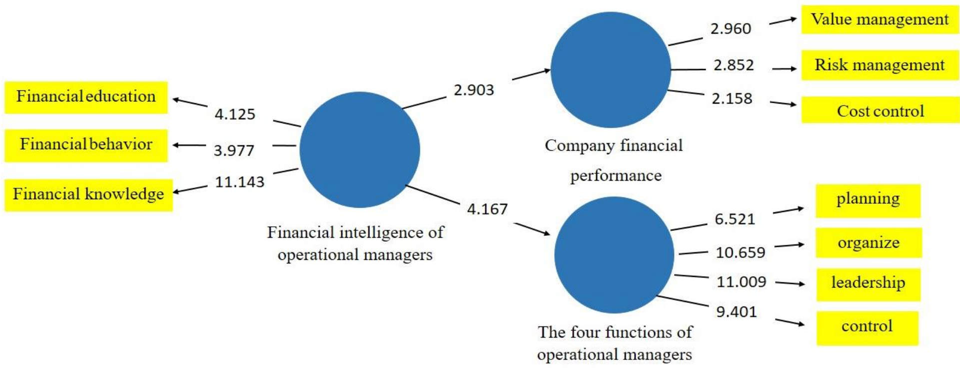

Figure 2 : Main path analysis model in a significant state

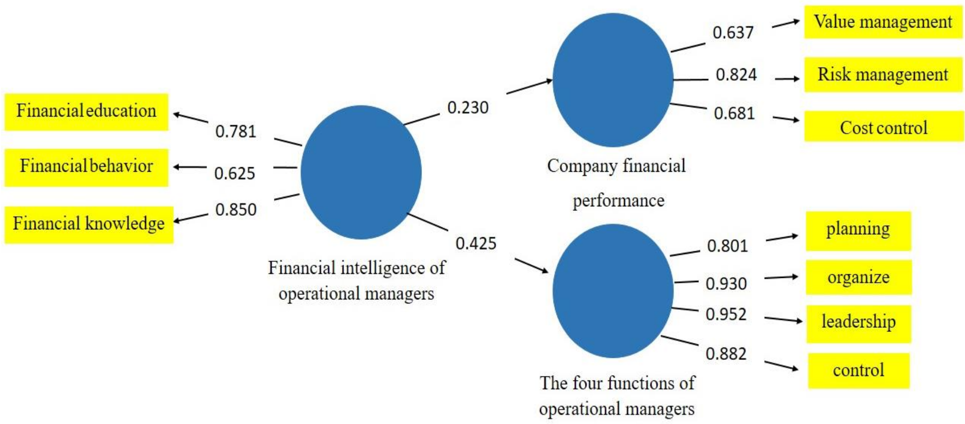

Figure 3 : Main path analysis model in standard coefficient mode

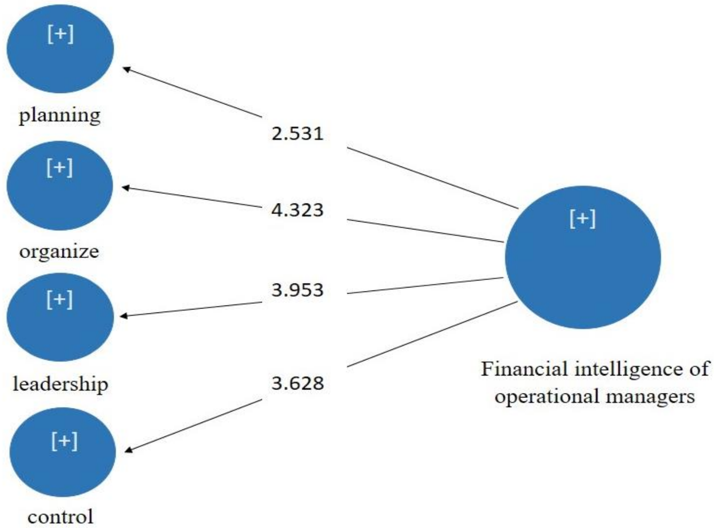

Figure 4 : Sub-path analysis model in a significant state

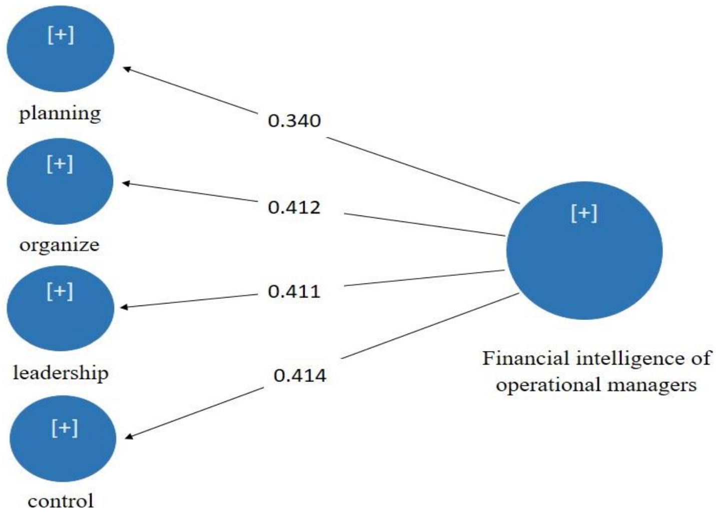

Figure 5 : Sub-path analysis model in standard coefficient mode

To examine the fit of the model in partial least squares, we use the global quality standard proposed by Amato et al. In 2004.

GOF = $\sqrt{\overline{communality} \times \overline{R^2}}$

$\overline{communality}$ = average of each variable and measures the quality of the external model.

R2 is the average of the coefficients of determination for each endogenous latent variable and measures the quality of the internal model and is calculated for each endogenous variable according to the latent variables that explain it. Three values of 0.01, 0.25 and 0.36 have been introduced as weak, medium and strong values for GoF (Wetzels et al., 2009).

Table 3: Calculation of internal model fit

R^2	Communality	Variable
	0.7	Financial intelligence
0.053	0.69	Financial performance
0.181	0.75	The four functions of managers
GOF=0.54		Goodness fit index

As you can see in Table 3, the value of the goodness-of-fit index is 0.54, which indicates an above-average overall fit for the structural model. That is, the internal model has enough power to test the hypotheses and the test results can be considered 100% statistically reliable. Also, the criterion R2 or coefficient of determination indicates the effect that exogenous variables have on an endogenous variable. This criterion is calculated only for endogenous structures and its value is zero for exogenous structures. The higher the coefficient of determination of a model, the better the fit of the model. Three values of 0.19, 0.33 and 0.67 have been introduced as criteria for weak, medium and strong values (China, 1998).

Based on the model obtained from the test of research hypotheses, we examine the confirmation or rejection of hypotheses. To confirm or reject the hypotheses, we use the significance coefficient (t-statistic). If the t-statistic is more than 1.96 or less than -1.96 (at the 5% error level), the hypothesis is confirmed and a significant relationship is obtained between the two hidden variables.

Hypothesis test	Significant amount	Hypothesis
Confirmed	4.323	Financial intelligence of operational managers affects the activity of organizing operational managers of oil refining and distribution companies
Confirmed	3.953	Financial intelligence of operational managers affects the leadership activity of the operational managers of the oil refining and distribution company
Confirmed	2.531	Financial intelligence of operational managers affects the planning activities of operational managers of oil refining and distribution companies
Confirmed	3.628	Financial intelligence of operational managers affects the control activity of operational managers of the oil refining and distribution company
Confirmed	2.903	The financial intelligence of the operating managers affects the financial performance of the oil refining and distribution company.
Confirmed	4.167	Financial intelligence of operational managers affects the four main functions of operational managers of oil refining and distribution companies .

CONCLUSION AND RECOMMENDATIONS :

The first main hypothesis: Financial intelligence of operational managers affects the financial performance of the refining and distribution company of petroleum products.

According to Figures 2 and 3, it is clear that the standard coefficient of this hypothesis is 0.230 and a significant value of 2.903 (more than 1.96) and therefore it is concluded that this hypothesis with coefficient 95% confidence is confirmed

Based on the findings of the present study, it was found that there is a positive and significant relationship between financial intelligence and organizational performance and therefore it can be said that the main hypothesis is confirmed by the research data. Confirmation of the main hypothesis of the research indicates the importance of financial intelligence among managers of departments and organizations; Because the present study, as one of its goals, has sought to confirm the importance of financial intelligence of managers in organizations in order to help advance organizational goals.

The information obtained from the confirmation of this hypothesis confirms the importance of financial intelligence in improving the financial performance of my organization, including in the operational sector. From the perspective of experts, recognizing the goals and plans of the organization, the ability to formulate strategies and the mental ability of the manager to understand the problems and lead and lead work teams in the organization is very important.

The second main hypothesis: the financial intelligence of operational managers affects the performance of the four functions of operational managers of the oil refining and distribution company.

According to Figures 2 and 3, it is clear that the standard coefficient of this hypothesis is 0.425 and the significant value is 4.167 (more than 1.96) and therefore it is concluded that this hypothesis with coefficient 95% confidence is confirmed.

The data showed that financial intelligence as a whole has a positive and significant effect on the performance of the four functions of managers and this effect can be seen in most of the minor components of functions, all of which have a positive and significant effect. Based on the obtained data, it was found that the highest impact of financial intelligence is on the leadership and organization component and the lowest impact is related to the planning component.

Sub-hypothesis 1: Financial intelligence of operating managers affects the activity of organizing operational managers of oil refining and distribution companies

According to Figures 4 and 5, it is clear that the standard coefficient of this hypothesis is 0.412 and the significant value is 4.233 (more than 1.96) and therefore it is concluded that this hypothesis with coefficient 95% confidence is confirmed.

Sub-hypothesis 2: Financial intelligence of operational managers affects the leadership activity of operational managers of the oil refining and distribution company.

According to Figures 4 and 5, it is clear that the standard coefficient of this hypothesis is 0.411 and a significant value of 3.953 (greater than 1.96) and therefore it is concluded that this hypothesis with 95% confidence is confirmed.

Sub-hypothesis 3: Financial intelligence of operational managers affects the planning activities of operational managers of oil refining and distribution companies.

According to Figures 4 and 5, it is clear that the standard coefficient of this hypothesis is 0.340 and the significant value is 2.531 (greater than 1.96) and therefore it is concluded that this hypothesis with coefficient 95% confidence is confirmed.

sub-hypothesis 4: Financial intelligence of operational managers affects the control activity of operational managers of the refining and distribution company of petroleum products.

According to Figures 4 and 5, it is clear that the standard coefficient of this hypothesis is 0.414 and a significant value of 3.628 (more than 1.96) and therefore it is concluded that this hypothesis with coefficient 95% confidence is confirmed.

Research proposal

- The functions of leadership and organization are the first two dimensions in the influential element of financial intelligence, which shows that financial intelligence is not only related to accounting and financial decisions, but also in leadership and leadership as a non-financial dimension (not material in nature) and effects. It is strong and significant and it is necessary for organizations to pay more attention to it and according to the impact on financial performance, take the necessary courses for managers and lead the company to the most important goal, which is to create value and profitability.
- It is suggested to measure the financial intelligence of the managers of the organization and to strengthen it, because as an element affecting the financial performance can affect the goals and profitability of the company.
- It is recommended to speak in a conference about the level of familiarity of managers in the field of financial intelligence and its importance and the extent of its use in performing their functions, and to look at it from the perspective of specialization and specificity needed in management.
- It is suggested that in performing the 4 main functions of managers to pay more attention to the guidance and leadership of operational managers and to establish new methods to guide the organization towards the goals
- By using financial intelligence in planning, pay more attention to the financial dimensions of a program and control the risks of implementing a process.
- Cultural foundation in government organizations to strengthen financial intelligence and also the culture of learning the four functions in the eyes of managers
- It is suggested that managers hold training courses to guide employees to increase financial intelligence and effective performance.
- It is suggested to use this tool to hire people in the organization and their competencies
- It is suggested that students or professors interested in the subject of the effects of financial intelligence in the organization write a book on the angles of this issue so that device managers can read it to be fully informed of the importance of the subject and take an effective step in advancing their organization Take.

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Attachment number one

Factor loads		
	Initial	Extraction
Question01	1.000	.730
Question02	1.000	.813
Question03	1.000	.836
Question 04	1.000	.779
Question 05	1.000	.819
Question 06	1.000	.698
Question 07	1.000	.761
Question 08	1.000	.821
Question 09	1.000	.807
Question 10	1.000	.857
Question 11	1.000	.837
Question 12	1.000	.773
Question 13	1.000	.761
Question 14	1.000	.825
Question 15	1.000	.767
Question 16	1.000	.803
Question 17	1.000	.721
Question 18	1.000	.882
Question 19	1.000	.789
Question 20	1.000	.865
Question 21	1.000	.758
Question 22	1.000	.885
Question 23	1.000	.789
Question 24	1.000	.842
Question 25	1.000	.719
Question 26	1.000	.804
Question 27	1.000	.895
Question 28	1.000	.854
Question 29	1.000	.852

Question 30	1.000	.809
Question 31	1.000	.856
Question 32	1.000	.765
Question 33	1.000	.871
Question 34	1.000	.836
Question 35	1.000	.809
Question 36	1.000	.768
Question 37	1.000	.808
Question 38	1.000	.824
Question 39	1.000	.850
Question 40	1.000	.778
Question 41	1.000	.795
Question 42	1.000	.885
Question 43	1.000	.872
Question 44	1.000	.868
Question 45	1.000	.827
Question 46	1.000	.777
Question 47	1.000	.853
Question 48	1.000	.820
Question 49	1.000	.904
Question 50	1.000	.909
Question 51	1.000	.891
Question 52	1.000	.831
Question 53	1.000	.852
Question 54	1.000	.876
Question 55	1.000	.871
Question 56	1.000	.875
Extraction Method: Principal Component Analysis.		