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# Evaluating the effectiveness of enterprise resource planning (ERP) system to improve managers' decision-making through balanced scorecard approach

# Kia Parsa<sup>1</sup> and Niloofar Duffchahi<sup>2</sup>

<sup>1</sup> Professor and faculty member of Islamic Azad University, Tehran North Branch <sup>2</sup> Master Degree, Industrial Engineering, Islamic Azad University, Tehran North Branch

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# ABSTRACT

Evaluating organization performance for operational and strategic planning is a complex process and perhaps doing it successfully will be more difficult. Balanced scorecard system, as a comprehensive and strategic framework for evaluating organization performance, can lead to a balance between the short and long term goals. In this study this tool has been used to evaluate the effectiveness of enterprise resource planning system and its impact on improving managers' decision-making. Data was gathered by applying descriptive-survey research and statistical population consists of managers of one of the subsidiary units of Ministry of Economic Affairs and Finance and data was gathered by using interview and questionnaire method. The results show that the implementation of enterprise resource planning system can increase the effectiveness of enterprise resource planning system and improve managers' decision-making through some factors such as the availability of information, integrating the processes, avoiding parallel operation, and avoiding entering duplicate data. In addition, some factors such as lack of staff training, lack of dynamic system, and non-conformity of the system with organization needs are considered as weak points of this system that by using some solutions they will be reduced. Finally, establishing enterprise resource system improves managers' decision-making from financial, internal processes, client, and learning and growth perspectives. Internal processes perspective has the greatest impact and the learning and growth perspective has the least impact on improving managers' decision-making.

**KEY WORDS:** Evaluating the performance, enterprise resource planning, effectiveness, improving decisionmaking, balanced scorecard

# **1.INTRODUCTION**

Researches in the field of enterprise resource planning systems that have been implemented in the period of 1990-2005 are in the field of choosing the solution of the enterprise resource planning system as a solver of many organization problems in recognition of success factors and performance indicators. In recent years, researches have been focused on key success factors which have a role in successful implementation of enterprise resource planning projects and in some cases they are applied to evaluate the effectiveness of these systems through using Fuzzy approach, the theory of uncertainty, balanced scorecard, and integrated methods. But in none of them the improving of managers' decision-making has been taken into consideration. Most studies have been focused on identifying success factors, and introducing the available methods to evaluate the performance of the enterprise resource planning (ERP) system. In this study we try to evaluate the effectiveness of the implementation of (ERP) and its impact on managers' decision-making through balanced scorecards and by doing interviews and questionnaires distribution. Thus, studying the impact of system implementation and its role on organizations decision-making, and also improving methods are the goals of this research. Since this research is used the balanced scorecard to evaluate the performance of the enterprise resource planning in terms of finance, client orientation, internal processes, and learning and growth.

# **1.1 LITERATURE REVIEW**

Full understanding of the process at different levels can prevent problems and propel change process to ideal. It is necessary to adopt balanced approach to achieve this goal. This means that all strategic and operational levels should be defined clearly and expected benefits of each unit should be evaluated and analyzed so that the management can make optimal decisions [1] Enterprise resource planning systems turn the information and

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processes of a system into unified systems[2]. By using these systems, organizations and individuals are able to collect, evaluate, summarize, and interpret the information [3]. The enterprise resource planning system by improving the quality of information provides a good context for managers' making-decision. In this case, an organization will be successful and can make decision provided that its management system keeps pace with these changes [4]. Today, many organizations are looking for the best tools to meet the challenges of decision-making and performance evaluation. Balanced scorecard is the most successful performance evaluation system that creates balance between financial and non-financial and also organizational and non-organizational measures [5]. Cebeci in 2009 used balanced scorecard evaluation method to choose an appropriate (ERP) system and created several systems according to the needs achieved through balanced scorecard. Then he evaluated these systems by using Analytic hierarchy process (AHP) and selected the best one. In fact, this research seeks to introduce AHP as a method used to evaluate the system effectiveness and select an appropriate software package in initial stages [6]. In a research carried out by Kronbichler et al in 2010, different methods of (ERP) evaluation specially BSC( balanced scorecard) were introduced and there was no optimal method to evaluate all organizations since the appropriate method for each organization is selected regarding the type, size, and package of software used in each organization[7]. Chang et al in 2011 used Grounded Theory to analyze, test, and compare past data and categorized performance indicators based on four aspects of balanced scorecard. They used balanced scorecard to evaluate the performance since it can do overall evaluation. The analytic hierarchy process (AHP) was used to calculate the weight of each indicator and at the end fuzzy logic was used to convert quality to quantity data in order to evaluate the system [8].

Research conducted by Madapusi& D'Souza in 2012 has examined the impact of (ERP) implementation on operational performance of the organization. This research by offering a model is trying to discover the relationship between the operational performance of the organization and the enterprise resource planning system. The authors believe that if in any planning managers examine changes in the operational performance of the organization; they can gain better understanding from the system performance[9]. Lecic et al in 2013 published an article with the subject of the impact of (ERP) system on the organizational decision making and during their studies they reviewed the literature and express different definitions of integrated resources system, its components, and its impact on the whole organization specially decision making category, they acknowledged that the implementation of this system will affect on managers' decision [10]. Kou in 2014 examined the impact of (ERP) system on the organization about intangible benefits. He also used financial data gathered from 1999 to 2010, financial ratios, and T score to collect information about tangible benefits. The results showed that the implementation of (ERP) system can improve efficiency, increase the quality of decision making, improve work quality, and also increase revenue. From financial perspective, by comparing the benefits before and after the implementation of (ERP) system through using T score, it can be observed that the greatest difference which was really the same revenue increase occurred three years after the implementation of (ERP) system [11].

Sun et al in 2015 offered a research with the subject of step by step evaluation and development of (ERP) included four stages before and after the implementation. During this process, a team consisted of several experts, senior management, and (ERP), estimated the needs of the organization. They estimated number of problems due to these requirements. They identified the most important ones and specified CFS and KPI by using Delphi method. Then they found the relationship between them by using D-S method and weighted KPI cases and identified their relationship with CFS. According to these relationships, the desired (ERP) system was selected and implemented tentatively. Then, after 6 months its importance was measured [12]. In research conducted by Ghannadan and Sharifi in 2008, the offering models in the field of the evaluation of the performance of integrated systems including (ERP) with balanced evaluation approach were evaluated (Ghannadan and Sharifi, 2008). Joneidi and Abbas Mohsen in 2008 remembered balanced scorecard as an appropriate method to evaluate (ERP) and by using Regression Method, they showed that there was a significant relationship between financial views and non-financial perspectives. In researches conducted by Zohair Alimoradi about the evaluation of the performance of (ERP) systems, the Fuzzy logic was used to evaluate these systems. He acknowledged that by applying Fuzzy logic, mathematical modeling of vague and imprecise issues existing in human cognitive processes was very efficient and effective [13].

#### 1.2 Research hypotheses are as follows:

The main hypothesis:

Establishing integrated resource planning system (ERP) improves managers' decision-making.

Sub hypotheses:

1. Establishing integrated resource planning system (ERP) in terms of financial perspective improves managers' decision-making.

2. Establishing integrated resource planning system (ERP) in terms of client perspective improves managers' decision-making.

3. Establishing integrated resource planning system (ERP) in terms of internal processes perspective improves managers' decision-making.

4. Establishing integrated resource planning system (ERP) in terms of creating an environment for learning and growth perspective improves managers' decision-making.

In fact the goals of this research are: Examining how to implement an integrated management system in one of the sub-units of Ministry of Economic Affairs and Finance and its impact on managers' decision-making, studying the improvement of working condition, identifying an appropriate resource planning system, and offering appropriate solutions.

# 2. MATERIALS AND METHODS

In terms of goal, the current study is considered as applied research; it means this research offers practical solutions for improving decision-making to the managers of the organization under study by establishing the integrated resource planning system. Regarding data collecting method, this research is considered as descriptive-survey. This method is used to evaluate the effectiveness the resource planning system of the organization through the balanced scorecard. The subject of the research is the impact of the implementation of the integrated resource planning (ERP) system on improving the decision-making of the managers of one of sub-units of the Ministry of Economic Affairs and Finance. This research is conducted in management department of the Ministry of Economic Affairs and Finance. This study began from the beginning of the October 2013 to the May 2014 and the questionnaires were distributed and collected at the end of the April 2014 to the beginning of the August 2014. Statistical population of this study including middle managers of financial department of the Ministry of Economic Affairs and Finance who are employed in the mentioned organization and their number is reached to 70 persons. So, 59 subjects are selected as a sample as follows:[14]

$$\mathbf{n} = \frac{\mathbf{n}_{\mathbf{z}_{a_{/2}}}^2 \mathbf{p}(\mathbf{1} - \mathbf{p})}{(\mathbf{N} - \mathbf{1})\delta^2 + \mathbf{z}_{a_{/2}}^2 \mathbf{p}(\mathbf{1} - \mathbf{p})}$$
(1)

So, 65 questionnaires are distributed and only 60 questionnaires are collected and the data is used to analyze the research hypotheses. It should be noted that in this study the accidental-sampling method is used. In this research by using the questionnaire, experts opinions are collected, analyzed and by studying previous researches by the help of library method the necessary information is collected. These questionnaires are prepared for the purpose of researching and gathering required information to test the research hypotheses and include 2 sections. First section includes personal characteristics such as gender (bimodal- nominal scale), age (ordinal scale), working experience (ordinal scale), education (ordinal scale), marital status (bimodal- nominal scale), and employment status (nominal scale). Second section includes assessment scales for studied structures.

The questionnaire distribution method is used to evaluate the impact of the implementation of the integrated resource planning system on decision-making. For this purpose, by studying on decision making, balanced evaluation approach and also enjoying from opinions of studied society were applied. Then after experts' confirmation, a questionnaire with 24 questions was prepared that by using balanced evaluation approach tries to measure decision-making improvement from four dimensions such as financial, beneficiaries, internal processes, and learning and growth.

Dimensions	Component
Financial	Examining the impact of the integrated
Client	resource planning system on improving
Internal processes	decision-making
Learning and growth	

Table 1.Dimensions used in the second section of the questionnaire on the basis of variables

In the mentioned questionnaire 5 points Likert scale is used to evaluate the views of existing scales. The questionnaire is designed based on the existing uncertainties and is delivered to the people. The mentioned items are as follows:

- Measuring decision-making improvement from financial dimension that examines the costs of establishing (ERP) system, the efficiency of the organization, budget control, the costs of information technology section, and finally the costs of decision-making.

- Evaluating decision-making improvement from client (beneficiaries) dimension that examines response speed and brightness of service and provision of information to clients, clients' compliant resolution, maintaining clients' privacy, the way of dealing with clients.

- Measuring decision-making improvement from internal processes dimension that examines the improvement and standardization of procedures, internal controls, the amount of bureaucracy and paperwork, administrative violations, and coordinating various administrative units.

- Measuring decision-making improvement from learning and growth dimension that examines organizational culture, staff satisfaction, motivation, their commitment and loyalty to the organization, training courses, and promotion of administrative knowledge and required environment for research development.

The following tools have been used to examine the validity of the questionnaire:

- Studying and examining the questionnaires and questions which have been used in the same researches.

- Studying articles and several books related to the research topic.

- Consulting with experts and advisor professors to get guidance.

In order to determine the reliability of the questionnaire, 30 subjects were selected as a sample and the questionnaires were distributed among them. Cronbach's alpha method was used to calculate the desired characteristics. Cronbach's alpha coefficient obtained from the following equation is. /902, this amount of coefficient for all scales is higher than 0 /7; in another word it should be said that the questionnaire has required reliability [15].

$$va = \frac{J}{j-i} \left(1 - \frac{\sum s_i^2}{s_i^2}\right)$$
(2)

After selecting statistical sample and in order to collect data, the questionnaire was prepared to examine the impact of establishing the integrated resource planning system on managers' decision-making with balanced evaluation approach. Spss software was used to analyze data. Kolmogorov-smirnov Test was used to analyze data and test the hypotheses. Friedman Test also was used to examine the similarity of variables prioritizing. In this test the Null hypothesis states that the observations distributions in repeated measures are the same. In other words, there are no differences among distributions caused by repeated measurements on a group or among peer groups in the field of dependent variable. The statistic value of the test based on the following equation with critical value obtained from Chi-Square Distribution Table and at the desired confidence level is usually%95.

#### **3. RESULTS**

Sample separation based on the questionnaire variables is studied from different aspects and the results were obtained as follows. According to table 3, the respondents have positive attitudes towards improving managers' decision-making from financial perspective after establishing the system.

**Table 3.** The frequency of financial perspective variable

Average weight	Totally disagree	disagree	No comment	Agree	Totally agree	Question
3/73	2	6	10	30	12	1
3/68	2	9	7	30	12	2
3/90	1	5	4	39	11	3
3/76		5	15	29	11	4
4/08		2	8	32	17	5
3/78		1	20	30	9	6
3/82	5	28	64	190	72	Total

#### **Financial perspective:**

#### Client perspective (beneficiaries):

According to table 4, the respondents agree with improving managers' decision-making from client perspective (beneficiaries) after establishing the integrated resource planning system.

Average weight	Totally disagree	Disagree	No comment	Agree	Totally agree	Question
4/01	1	3	7	36	14	7
4/08	1	4	4	35	17	8
3/71	1	6	15	25	13	9
3/70	1	6	10	36	7	10
3/93	1	2	8	37	11	11
3/88	1	4	5	40	9	12
3/86	4	25	49	209	71	Total

 Table 4. The frequency of client perspective variable

#### Internal processes perspective:

According to table 5, managers' decision-making from internal processes perspective has been improved after establishing the integrated resource planning system.

Table 5. The frequency of internal processes perspective variable									
Average weight	Totally disagree	Disagree	No comment	Agree	<b>Totally agree</b>	Question			
4/23			5	35	19	13			
4/15		2	5	34	18	14			
3/91			15	34	10	15			
3/86		9	3	34	13	16			
3/49	1	7	19	26	6	17			
3/84		3	10	39	7	18			
3/91	1	21	57	202	73	Total			

 Table 5. The frequency of internal processes perspective variable

## Learning and growth perspective:

According to table 6, improving managers' decision-making from learning and growth perspective is caused after establishing the integrated resource planning system.

Average weight	Totally disagree	Disagree	No comment	Agree	Totally agree	Question
3/65	1	5	17	32	6	19
3/78	1	5	12	30	12	20
3/75	1	8	10	27	14	21
3/50	2	7	22	17	12	22
3/70	1	7	13	27	12	23
3/43	2	11	18	17	12	24
3/64	7	43	92	150	68	Total

Table 6. The frequency of learning and growth perspective variable

## 3.1 Studying the normality of variables distribution

Null hypothesis (H0): The normality of variables distribution

Alternative hypothesis (H1): Non-normality of variables distribution

If significance level of the test is less than 0/05, the null hypothesis will be rejected and it will be said with confidence level of %95 that data distribution is not normal. In fact, if significance level of the test is higher than 0/05, the null hypothesis will be accepted and it will be said that data distribution is normal.

Variable	Test statistic value (z)	Test significance level					
Financial perspective	1/363	0/449					
Client (beneficiaries) perspective	0/950	0/328					
Internal processes perspective	0/797	0/549					
Learning and growth perspective	0/747	0/632					

 Table 7.Studying the normality of variables distribution

According to above table, it is observed that the significance level of all variables is not less than 0/05, So, Null hypothesis with confidence level of %95 is accepted and the distribution of above variables is normal, for this reason, T-parametric Test is used to determine the mean of responses.

#### 3.2 Studying research hypotheses

The main hypothesis of the research is the study of the impact of establishing integrated resource planning system on improving managers' decision-making. In this regard, by using balanced scorecard (BSC), decision-making improvement is studied from four perspectives: Financial, client (beneficiaries), internal processes, and learning and growth.

The first sub-hypothesis: Establishing integrated resource planning system from financial perspective improves managers' decision-making.

Null hypothesis (H0):Establishing integrated resource planning system from financial perspective does not improve managers' decision-making.

Alternative hypothesis (H1):Establishing integrated resource planning system from financial perspective improves managers' decision-making.

<b>Table 8.</b> Population Mean	Test for a	decision-making	improvement varia	ıble	from	financial	pers	pective
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Mean limitation		Significance	Standard deviation	Mean	Т	
Lower	Upper	level		score	statistic	
0/67	0/96	0	0/82	3/82	11/123	

As the results show, T statistic is 11/123 and standard deviation of studied sample is equal to 0/82. According to these results and regarding to this fact that the significance level of the test is less than 0/05 and it is equal to zero, it can be concluded that with confidence level of %95 the null hypothesis is rejected and the establishment of the system from financial perspective improves managers' decision-making.

The second sub-hypothesis: Establishing integrated resource planning system from client (beneficiaries) perspective improves managers' decision-making.

Null hypothesis (H0):Establishing integrated resource management system from client (beneficiaries) does not improve managers' decision-making.

Alternative hypothesis (H1):Establishing integrated resource management system from client (beneficiaries) perspective improves managers' decision-making.

Table	9. Population Mean Test for decision-making improvement	variable	from
	client (beneficiaries) perspective		

Mean limitation		Significance	Standard	Mean	Т
Lower limit	Upper limit	level	deviation		statistic
0/71	1/04	0	0/877	3/87	10/517

As the results show, T statistic is 10/517 and standard deviation of studied sample is equal to 0/877. According to these results and regarding to this fact that the significance level of the test is less than 0/05 and it is equal to zero, it can be concluded that with confidence level of %95 the null hypothesis is rejected and the establishment of the system from client (beneficiaries) perspective improves managers' decision-making.

The third sub-hypothesis: Establishing integrated resource planning system from internal processes perspective improves managers' decision-making.

Null hypothesis (H0):Establishing integrated resource management system from internal processes perspective does not improve managers' decision-making.

Alternative hypothesis (H1):Establishing integrated resource management system from financial perspective improves managers' decision-making.

Mean li	mitation	Significance	Standard deviation	Mean	Т	
Lower limit	Upper limit	level			statistic	
0/77	1/05	0	0/918	3/91	13/303	

Table 10. Population Mean Test for decision-making improvement variable from internal processes perspective

As the results show, T statistic is 13/303 and standard deviation of studied sample is equal to 0/918. According to these results and regarding to this fact that the significance level of the test is less than 0/05 and it is equal to zero, it can be concluded that with confidence level of %95 the null hypothesis is rejected and the establishment of the system from internal processes perspective improves managers' decision-making. Upper and lower limit are positive, it can be concluded that the obtained mean score is above 3 and according to above table is equal to 3/91.

The fourth sub-hypothesis: Establishing integrated resource planning system from learning and growth processes perspective improves managers' decision-making.

Null hypothesis (H0):Establishing integrated resource planning system from learning and growth processes perspective does not improve managers' decision-making.

Alternative hypothesis (H1):Establishing integrated resource planning system from learning and growth perspective improves managers' decision-making.

Table 11. Population Mean Test for decision-making improvement variable from	1
learning and growth perspective	

Mean limitation		Significance	Standard deviation	Mean	Т
Lower limit	Upper limit	level			statistic
0/42	0/84	0	0/636	3/63	6/03

As the results show, T statistic is 6/03 and standard deviation of studied sample is equal to 0/636. According to these results and regarding to this fact that the significance level of the test is less than 0/05 and it is equal to zero, it can be concluded that with confidence level of %95 the null hypothesis is rejected and the establishment of the system from learning and growth processes perspective improves managers' decision-making. Upper and lower limit are positive, it can be concluded that the obtained mean score is above 3 and according to above table is equal to 3/63.

The main hypothesis: Establishing integrated resource planning system (ERP) improves managers' decisionmaking.

Null hypothesis (H0):Establishing integrated resource planning system (ERP) does not improve managers' decision-making.

Alternative hypothesis (H1):Establishing integrated resource planning system (ERP) improves managers' decision-making.

**Table 12.** Population Mean Test for decision-making improvement variable

Mean limitation		Significance	Standard deviation	Mean	Т
Lower limit	Upper limit	level			statistic
0/65	0/95	0	0/806	3/80	10/989

As the results show, T statistic is 10/989 and standard deviation of studied sample is equal to 0/806. According to these results and regarding to this fact that the significance level of the test is less than 0/05 and it is equal to zero, it can be concluded that with confidence level of %95 the null hypothesis is rejected and the establishment of the (ERP) system improves managers' decision-making. Upper and lower limit are positive, it can be concluded that the obtained mean score is above 3 and according to above table is equal to 3/80.

# **3.3** Studying the impact of demographic variables on establishing (ERP) system Demographic variables (gender)

The results of Variance Analysis Test are as follows (Table 13). According to the results and regarding the fact that the significance level of the test is above 0/05 and it is equal to 0/88, it can be concluded that with confidence level of %95, there is no significant difference between men and women respondents in terms of the impact of establishing (ERP) on decision-making improvement.

Table 13. Studying the impact of gender variable on establishing (ERP) system variable on decision-making

Significance level of the test	Fisher statistic	Dependent variable	Independent variable
0/88	0/023	The impact of (ERP) system on decision-making	Gender

#### Demographic variables (Marital status)

The results of Variance Analysis Test are as follows (Table 14):

Table (14) indicates that the significance level of the test is equal to 0/103 and above 0/05, so, it can be concluded that with confidence level of %95, there is no significant difference between single and married respondents in terms of the impact of establishing (ERP) on decision-making improvement.

 Table 14.Studying the impact of marital status variable on establishing (ERP) system

 variable on decision-making

Significance level of the test	Fisher statistic	Dependent variable	Independent variable
0/103	2/738	The impact of (ERP) system on decision-making	Marital status

#### **Demographic variable (Age)**

The results of Variance Analysis Test are as follows:

Table (15) indicates that the significance level of the test is equal to 0/491 and above 0/05, so, it can be concluded that with confidence level of %95, there is no significant difference among respondents with different ages in terms of the impact of establishing (ERP) on decision-making improvement.

Table 15.Studying the impact of age variable on establishing (ERP) system variable on decision-making

Significance level of	Fisher	Dependent variable	Independent
the test	statistic		variable
0/491	0/815	The impact of (ERP) system on decision-making	Age

#### **Demographic variable (Education)**

The results of Variance Analysis Test are as follows:

Table (16) indicates that the significance level of the test is equal to 0/001and less than 0/05, so, it can be concluded that with confidence level of %95, there is significant difference among respondents with different education levels in terms of the impact of establishing (ERP) on decision-making improvement.

Table 16.Studying the impact of education variable on establishing (ERP) system variable on decision-making

Significance level of the test	Fisher statistic	Dependent variable	Independent variable
0/001	2/247	The impact of (ERP) system on decision-making	Education

#### **Demographic variable (Working experience)**

The results of Variance Analysis Test are as follows:

Table (17) indicates that the significance level of the test is equal to 0 and less than 0/05, so, it can be concluded that with confidence level of %95, there is significant difference among respondents with different working experience in terms of the impact of establishing (ERP) on decision-making improvement.

 Table 17.Studying the impact of working experience on establishing (ERP) system variable on decision-making

Significance level of	Fisher	Dependent variable	Independent
the test	statistic		variable
0	0/682	The impact of (ERP) system on decision-making	Working experience

#### **Demographic variable (Employment status)**

The results of Variance Analysis Test are as follows:

Table (18) indicates that the significance level of the test is equal to 0/396and above 0/05, so, it can be concluded that with confidence level of %95, there is no significant difference among respondents with official and contractual education level in terms of the impact of establishing (ERP) on decision-making improvement.

Table 18. Studying the impact of employment status on establishing (ERP) system variable on decision-making

Significance level of the test	Fisher statistic	Dependent variable	Independent variable
0/396	0/731	The impact of (ERP) system on decision-making	Employment status

#### 3.4 Ranking research variables

Null hypothesis (H0): The priority of variables is the same.

Alternative variables (H1): At least, two priorities are different.

According to above table and since the significance level of the test is less than 0/05 and equal to 0/002, it can be concluded that with confidence level of %95 the Null hypothesis is rejected and at least two priorities are different. Also, according to the obtained mean scores, internal processes perspective is the first priority, client (beneficiaries) perspective is the second priority, financial perspective is the third priority, and learning and growth perspective is the fourth priority.

Significance level 0/002

Table 2	20.Variables priority
Mean score	Variable
2/75	Internal processes perspective
2/73	Client (beneficiaries)
	perspectives
2/53	Financial perspective
1/98	Learning and growth
	perspective

#### Table 19.the results of Friedman Test (Variables priority)

**Chi-square statistics** 

15/390

#### 4. DISCUSSION

If it is possible to refer to the researches in the field of evaluating (ERP) performance through Fuzzy-AHP logic, the first step of evaluation starts with determining performance indicators and if these indicators are selected incorrectly, the total evaluation system will be discredited. Balanced scorecard method offers fourth indicators which tested before and can evaluate enterprise resources of system precisely. In this study, we try to focus on how managers make decisions and also evaluate the impacts of the implementation of (ERP) on managers' decision-making. As it is observed, the implementation of (ERP) in the organization improves managers' decision making from four perspectives: Financial, client (beneficiaries), internal processes, and learning and growth perspectives. For instance, the time of reports preparation which lasts 4 hours is reduced to less than 15 minutes. Regarding to this fact, the managers should prepare required reports at any time to make decision based on them.

Clients or costumers of financial sector include contractors, employees, organizational units, and organizational units of the provinces. The results show that (ERP) system meets the needs of clients very quickly. Clients' information which is available in the enterprise resource planning system includes tax records, statements, a quittance, and contracts. So, the managers can access to information very quickly and also can decide about them with high accuracy in a short period of time and meet the needs of clients, this provides more satisfaction for beneficiaries. In fact, this system through checking documents, economic codes, statistical calculations, and systematic analysis, accelerates managers' decision-making and finally accelerates meeting the needs of clients.

Studying varieties priority shows that from respondents' point of view, variables priority is not the same. According to the obtained mean scores, internal processes perspective is the first priority, client (beneficiaries) perspective is the second priority, financial perspective is the third perspective, and learning and growth perspective is the fourth perspective. In other words, the implementation and establishment of the system has little impact on improving managers' decision-making in terms of education and learning and growth, but it acts more successfully in improving internal processes and meeting the needs of clients than financial and education dimensions. It can be argued that quality costs versus financial and quantity costs have been reduced remarkably by implementation of the mentioned system. It is found during these researches that dynamic system is one of the effective factors which has important role in managers satisfaction from (ERP) system and leads managers to decide better. By dynamic system we point to the system in which we can define new work in necessary situations for example we can define and implement new form in the system.

Managers still do not want to use this system. Managers of each unit do not want to share their information with other units so that this system will not be implemented in the whole organization. So, (ERP) system is considered as optimal system when it is efficient for both the management and the organization.

#### **5. CONCLUSIONS**

Today, organizations are located in environment that is constantly changing, and you cannot survive in this troubled situation unless you have the ability to respond to the changes. So, using information systems through which we can cover all activities and duties in the organization and provide necessary information to the users is an important tool in today's organization.

In this research, the impact of the implementation of (ERP) system on improving managers' decision-making with balanced evaluation approach has been studied. According to the results of the study, successful companies do not only rely on financial measures to evaluate their performance, but they can evaluate their efficiency through different perspectives such as client, internal processes, and learning and growth perspectives. Balanced Scorecard creates a common language so that administrators can use it to discuss about the direction and priorities of their organization to create an overview towards the performance of the whole organization instead of limited focus.

According to the research results, the implementation of (ERP) system can improve managers' decision-making from four perspectives: Financial, client (beneficiaries), internal processes, learning and growth. It was also found that internal processes perspective is more important. In fact, the integration of the organization processes leads to the simplification of affairs, the preparation of the reports and information, and removing parallel operation so that necessary information has been provided for the management of the organization at any time and the best decisions are made by the management.

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