



# Ranking the Factors Affecting the Implementation of Enterprise Resource Planning (ERP) in the Office of Supreme Leader by Using Hierarchical Process (AHP)

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## ABSTRACT

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Today's organizations need the knowledge and resources to manage their organization and human resources in order to achieve success and power of competition. If these organizations can use their enterprise resources and succeed in implementing them, they can achieve competitive advantage and growth. Therefore, due to the role and importance that the implementation of enterprise resource planning has in the goals and excellence of organizations, this study was conducted to investigate the factors affecting the successful implementation of ERP systems and their importance and ranking in relation to the office of Supreme Leader. To achieve this goal, 110 questionnaires were distributed among experts and finally 76 questionnaires were returned. Then ranking was performed based on data from these remaining 76 questionnaires. This study was applied objectively and a questionnaire was used for data collection. This study was performed by AHP method. The results indicate that project management has the highest priority and communication has the lowest priority among the factors affecting the implementation of enterprise resource planning.

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## 1. Introduction

### *1.1. Statement of problem*

The unpredictable growth of information and communication technology over the past decades has had a profound impact on various aspects of the performance of organizations relying on the development of various industries such as electronics, computers, and telecommunications. At the same time with these changes, the environment of activity of different organizations has become more complex and therefore, the need for different systems to be able to make better communication between different enterprise components and facilitate the flow of information between them has increased dramatically.

On the other hand, organizations are under pressure to provide higher quality services and in accordance with each customer's specific needs in a shorter time. From a long time ago, integrating organizations has been the wish of managers and the implicit goal of organizational theories so that all of its components act in an organic link with each other as one intelligent person but with the capability of an organization. Of course, information and information technology are not the cause of organic link with components of an organization by itself. Even if all the information required by the organization is provided using the most advanced technologies, it will not be a reason on the integrity of the organization's operations (Faghri et al., 2006). These systems totally known as enterprise systems have provided the ground for managers to use appropriate information in their different decision-making everywhere and at the right time (Aarabi & Mohammad Kazem, 2014). Today, information is an important resource that is severely needed for the development of other resources. The use of information systems of management is a new phenomenon that leads to better planning, better decision making and better results by emphasizing the correct use of information (Vazife Dust et al., 2010). Since the early 1990s, the emergence of integrated ERP software with the aim of establishing large organizations has greatly developed. The highly powerful, sophisticated, and expensive software are pre-designed systems that are implemented after a little change in them by implementer consultants and consultants of analyzing enterprise processes. In many cases, organizations are forced to reform and review their processes because of the compulsion in adherence from the logic governing such software (Rahimi & Abbasi Rostami, 2015). By growing organizations and institutions, there is a need for integrated information systems that can control all of the

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sections and tasks within the organization using a computer system. Research shows that productivity will increase, if the organization's resource planning system is properly deployed according to economic and enterprise issues (Ebrahimi Kordlar et al., 2011).

Increasing speed of technology in daily operating processes has forced enterprises to maintain timely, accurate and accessible information. These environmental features increase the pressure on enterprises to reduce costs in the supply chain, provide more confident delivery time and better customer service, improve quality, and effective integration of the demand, supply and production processes. For this reason, more organizations tend towards enterprise resource planning (Rasoolian, 2015). The capacity of ERPs to integrate enterprise processes and information of different functional areas through a centralized database causes experts to identify these systems as a prerequisite for success in the 21st century. Providers of enterprise resource planning systems claim that their product has been tested many times and created under many experiences and this issue enables them to provide extraordinary solutions for various sectors of industry and services. This fact is tangible in many enterprises, but experience has shown that these products in many other enterprises have not been able to be as useful as they should be. So investigating the success factors of ERP systems in different enterprises is an important challenge since the emergence of ERP (Mahmoudi & Ahmadi, 2008).

ERP systems require the deep investigation and feasibility for implementation due to complex nature and major changes that create in an organization's work culture, because the implementation of such large systems in addition to software system changes follows process changes. For this reason, in many cases, it has not met market expectations in many cases. The infamy of ERP implementation has been due to the long time required and the cost more than expected. The best plans to integrate the whole organization often fail because of system mismatches, legal factors, high costs, and time-consuming. Therefore, it should be careful in implementation of these systems in order to the company not to be faced with failure and losses in its implementation. There are factors involved in implementing an enterprise resource planning systems that are different in terms of impact, and managers should assign a degree of importance to these factors in terms of their impact. Accurate identification of success factors will be a guarantee for better implementation of the enterprise resource planning system (Farajzadeh Dehkordi et al., 2014). The main philosophy of ERP is process-oriented, and its development in the organization involves major sections. For this reason, the implementation of such systems should be considered as projects with enterprise dimensions. This attitude requires changes in the cultural, human, tactical, structural, and process dimensions across the organization. Despite such an obligation, many managers of ERP projects focus solely on the technical and financial aspects of the project and are unaware of other aspects and this issue is underlying failure of such projects (Berchet and Habchi, 2005) Since successful implementation of these systems has many benefits for organizations and failure can have irreparable damages, it is necessary to identify the factors affecting the success in implementing these systems. For this reason, it is necessary to be identified the critical success factors and their importance before implementing these systems, so that the organization can measure their readiness. Based on what has been said, the main problem of this research can be stated as follows:

What are the factors affecting the successful implementation of ERP systems and how is their importance and ranking to each other to implement in the office of supreme leadership?

### ***1.2. The importance of the subject***

Research shows that in large firms, ERP leads to the expansion of the firm's activities from the control mode of the production activities in the firm to out of it, i.e, encompassing customers and suppliers (Farajzadeh Dehkordi et al., 2014). What can be found from numerous studies is that IT projects such as ERP have high risk and in many cases, they have not been able to be completed in a certain time and with certain cost. Therefore, controlling how these systems are implemented and providing solutions to improve the performance of these projects can be very effective (Ramazanian et al., 2015). On the other hand, the number of Iranian organizations seriously involved in the purchase and implementation of ERP systems is not high. Only a few major organizations in the country have decided to use these systems that they are currently implementing these systems at their organization level. Most organizations are waiting to see the results of implementing these systems in other organizations, and despite beginning of study and consulting phases are not actually involved in the implementation of the main project, the success or failure of each of these projects can have a great impact on ERP market of country (Vazifeh Dust et al, 2010). In general, the following cases can be pointed out in terms of the benefits of ERP in organizations:

Creating enterprise integration from the information aspect and increasing the consistency in existing information, the possibility to use standard and common methods in the world, reengineering enterprise processes and reducing the time to perform them, transforming enterprise processes from implicit to explicit mode.

Reducing costs, the possibility of faster installing and setting of systems in the organization, possibility and facilitating the development of new systems and technologies, the possibility of creating business partnerships, joint ventures, merger, etc. for organization with less cost and more efficiency and better result, changing focus from computer programming in the organization to improve processes, improving the quality of the decision-making process, or providing management information at the right time with the right quality and costs, developing the infrastructure needed to enter the issue of e-business, better and faster accountability to market and customer needs, better international interactions (Vazifeh Dust et al., 2010; Iran Zadeh, 2015).

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## **2. Literature**

### ***2.1. Enterprise Resource Planning (ERP)***

In ERP management literature, various definitions have been stated, the most important and the most comprehensive are referred in following.

An enterprise resource planning system is an integrated information system of the main processes of enterprise that provides intertwining of operations and information (Azevedo et al, 2014). Integrating creates four main resources of the enterprise, i.e finance, human resources, materials and machinery, added value that creates the required underlying for enhancing the enterprise's position in today's competitive world. These systems support management in making decisions on current operations and strategic plans of the organization by keeping records, controlling current operations, and timely

information. ERP, as the crystallization of information in operational formats, on the one hand, architects all of the organization's information in defined formats, and on the other hand, controls all the activities of the organization in these formats. (Deaky & Parv, 2017) Processes defined when designing an organization in ERP quickly show their efficiency and effectiveness in the formats of measuring efficiency of organization that is always raised as a part of ERP and with the ERP maintenance team, the path of enterprise will be remained in the path of improvement and competitiveness with other organizations (Bayat et al., 2009). The ERP system is a general term for an integrated computing software system that includes a set of business applications for performing accounting, inventory control, logistics, and more. The main and ultimate task of a comprehensive ERP system is to automate business processes, provide shared and concurrent use of data users and produce data at the organization level. At least, what seems at ERP level includes just in time aspects by providing modules with names as repetitive manufacturing that provides a capability for production processing and traction processing systems, continuous improvement philosophical elements, visual management and wrong correction of lost data (Pak Maram & Rostamnejad, 2015).

ERP is called software infrastructure among all types of software systems in the IT industry and includes various parts of the business process such as planning of goods and processes, sales, manufacturing, purchasing raw materials and customer service. For this reason, ERP architecture is closely related to three important areas of business I.e customer relationship management and providers chain management and supplier relationship management (Saremi et al., 2007).

## 2.2. ERP difference with other integrated systems

In order to the enterprise resource planning system to be useful and effective for the organization, at least some of the organization's business methods should be modified and new methods to be developed. Hence, business process reengineering is closely related with implementation and deployment of enterprise resource planning system. One of the unique features of enterprise resource planning system is the application of superior experience in designing system business processes. Superior experience is a method that is preferred over other methods for a particular task. In other words, superior experience is the most effective way of doing a particular task, while in other integrated systems; the only goal is to integrate information and data regardless to improving and utilizing superior experiences (Jalali, 2007). In the following, the most important of these differences are referred.

ERP should be considered as the newest and most developed tool of management information systems and its functionality is the process thinking instead of task structures, attention and conversion of customer demands to quantitative data in order to increase customer satisfaction. ERP tries to relate all processes in the organization as integrated and with a process approach.

ERP shows superior options in addition to integration, which is why software giants have examples from all stages of production, distribution and distribution that provide to organizations in their versions and technology is entered the organization through these new software systems.

Functions of the enterprise resource planning system

In general, no specific standard can be provided for the functions of software of enterprise resource planning, because they are often prepared for each organization and, if sold, they need to be modified and coordinated with the organization and its specific business institute. Therefore, some software used as the best option for some institutions may have some of the functions mentioned above, or some by having all the functions may be disabled in responsiveness and meet the needs of an institute. (Soliman and Karia, 2015) However, the major functions of enterprise resource planning can be categorized as follows:

1- Distribution and Sales: Distribution and sales functions are divided into two general groups:

A. Automation of sales force: Provides functions for performing sales processes- such as contract management, sales prediction and order management- to improve tasks such as order entry, delivery, and issuance of invoice by providing real-time access to sales information, (Christofi et al, 2013)

B. Customer Relationship Management: Leads customer to company relationships, including product selection, purchase, complaints, after-sales service and marketing, to a managed system (Wimmer & Hall, 2015).

2- Production Planning: This part of the software provides fast delivery capability for institute by reducing scheduling periods, providing up-to-date information and increasing the productivity of business processes. Such a method can be applied in various industries. Integrating sales support section with other sections of the supply chain ensures that all transactions related to support process- from provision of materials and warehousing to sales and distribution- to be optimally regulated.

(Ghorpade and Mantri, 2015)

3- Preparation and provision of materials: The provision support section, sometimes known as material management or warehouse management or even supply chain management, has a wide range of integrated functions that optimize purchasing, inventory management and operations of warehouse. The high level of automation in this section makes it much easier to perform time-consuming activities such as determining the optimal source of supply, analyzing and calculating retail prices, issuing purchase orders, managing the assigning process for purchasing requests and bill processing (Christofi et al, 2013)

4- Organization and human resource management: This type of function includes functions such as management of employees, processing commercial events, organization management processing, payment processing and payroll management. The various applications in this section are designed to facilitate tasks such as recruitment, employees' development planning and creating characteristics of job and qualification verification (Verma. et al 2016)

5- Commercial planning and control: This section includes the functions of cost control, profitability analysis, accounting of profit center and cost management. Control of product cost includes two processes of product order costing and inventory control depending on the type of institution. Product costing involves estimating material costs or inventory costs before a manufacturing order. This applied section is a tool for cost planning and pricing that calculates the cost of manufactured goods as well as the sold goods for each product (Verma. Et al, 2015)

## 3. Research background

Mousa Khani et al. (2014) in a study entitled "Providing a Model to Measure the Requirements of Implementation of ERP Project (Case Study of Qazvin Azad University)" state that implementation of ERP system requires spending high time and cost and has profound effects on different dimensions of organization. It is essential to be examined before implementing project. The results of this study show that the university has a proper context technically, economically and operationally on implementing a simple ERP system to minimum basic standards for ERP development, but despite appropriate plans in technology development, readiness assessment of human resources are below average.

Iranzadeh (2015), in a study entitled "Explaining and Choosing the Enterprise Resource Planning System and Ranking the Factors Affecting Its Deployment (Case Study: Automotive Parts of East Azarbaijan)" states that the selection of the enterprise resource planning system due to the high cost of purchasing and implementing it, as well as the complexities of adapting the organization's processes with the new system, are considered critical management decisions. The results showed that the factors influencing the selection and deployment of enterprise resource planning system include: infrastructure, economic growth, productive power, regional success and regional regulation, computer culture, organizational size, managerial commitment, and process reengineering.

Pak Maram and Rostam Nejad (2015) in an article titled "Simultaneous Application of Lean Production and ERP: Towards an ERP-Based Lean Implementation Process" state that lean production systems and enterprise resource planning are often considered as two important strategies to achieve competitive advantage in today's global production environments. The findings of this study indicate that the implementation of a simultaneous ERP system can act as a mediator for the use of lean production methods. By using the ERP implementation process as a platform and intermediary for utilizing lean practices, a medium-sized company can gain benefits for production management.

Rasulian (2015), in a study entitled "Vision, a Critical Factor of Enterprise Resource Planning", states that enterprise resource planning systems are as one of the tools that businesses seek to gain competitive advantage using it. Since the implementation of enterprise resource planning system is with high risk, heavy costs and long implementation time, it is important to identify the factors affecting it. The results of this study showed that internal factors have higher priority than external factors and among internal factors, support of senior managers, business vision, culture of change management, project management have higher priority.

Ramazanian et al. (2015), in a study entitled "Providing Support Model for Implementing Projects of Enterprise Resource Planning (ERP) with System Dynamics Approach" stated that increasing the number of experienced users, eliminating personalization and increasing users' training improve the performance of the project and thus it has a significant impact on reducing the time and cost of implementing ERP systems.

Shatat (2015), in a study titled "Key Factors of Success in Implementing Enterprise Resource Planning (ERP) (an Exploratory Study in Oman)" states that the ERP system has been the subject of much academic research in recent times. Successful implementation of this system can have a huge impact on the success of organizations. The results of this study showed that effective factors in implementing this system include: senior management's support, project management, reengineering of business process, user education, users' engagement, business planning and vision, selecting accurate package, changing readiness and culture, certain short-term and long-term goals, learning competencies, minimum customization, monitoring and evaluating performance, strategic planning in information technology, combination and group work, vendor support, appropriate business and proper information technology systems, data analysis and conversion, training new business processes, cooperating with seller.

Weimer and Hall (2015) in a study titled "A Technical Infrastructure for the Integration of Dynamics AX ERP and CRM in University Curriculum" state that enterprise resource planning and customer relationship management have a great importance in universities. The results show that ERP and CRM can help organizations to increase productivity.

Venkatraman & Fahd (2016) in a study entitled "Challenges and Success Factors of ERP Systems in Small and Medium-sized Enterprises in Australia" state that today, a great potential is considered for ERP systems in small and medium-sized businesses. According to the dynamic nature of business in small and medium-sized businesses (SMEs), enterprise resource planning (ERP) is the best method. Factors such as the status of the business process, customer relationship and beneficiaries, and reducing maintenance costs affects the implementation of enterprise resource planning in SMEs.

Verma et al. (2016) in a study entitled "The Role of Management Control System in Implementation of ERP Project" state that organizations use ERP system to increase access to information in real time. This issue causes to make better decision-making, maximize efficiency of business process, increase productivity, and it can reach the organization to the highest level of profit and help to increase the organization's performance.

Dickey and Parou (2017) in a study titled "ERP system in 3D printing industry" stated that ERP system can have a significant impact on corporate revenue through improving product. This system can increase the effectiveness of the organization and reduce costs and enhance the competitiveness of the company.

Jirava and Tosifa (2017) in a study titled "An Specification of the Integration of Enterprise Resource Planning Systems" state that in the Czech Republic, the use of enterprise resource planning and its integration with other systematic planning of an organization can affect the success and efficiency of organizations.

### **3.1. Research objectives**

The main objective of this study is to identify and rank the factors affecting the success of implementing ERP systems with a hierarchical analysis approach. Other goals of this study include investigating the factors affecting ERP, challenges and success factors in its implementation.

### **3.2. Research questions**

The research includes 3 main questions and 8 sub-questions.

1. What are the factors affecting the implementation of ERP in the office of Supreme Leader? 2. How is the prioritization of the factors affecting the implementation of ERP in the office of Supreme Leader 3. How is the weight of the criteria in the implementation of the Enterprise Resource Planning

(ERP) in the office of Supreme Leader?

### 3.3. Sub-questions

1. What are the importance factor of the sub-factors of senior management's commitment and support? 2. What are the importance factors of the sub-factors of project management? 3. What are the importance factors of the sub-factors of user education? 4. What are the importance factors of the sub-factors of the business plan and vision? 5. What are the importance factors of the sub-factors of the technology infrastructure? 6. What are the importance factors of the sub-factors of participation of beneficiaries? 7. What are importance factors of the sub-factors of change management? 8. What are the importance factors of the sub-factors of communications?

## 4. Research Methodology

The research is applied objectively and it is a descriptive-survey research in terms of data collection. The statistical population of the present study was the clients referred to the representation office of the Wali Faqih in Hajj and pilgrimage affairs in Tehran. 110 questionnaires were distributed among the elites and finally 76 questionnaires were returned. Ranking was performed based on the data obtained of 76 remained questionnaires. The sample size was obtained by Cochran formula and simple random sampling method was used to select the respondents. In order to determine the main factors of the research, the main indicators affecting the implementation of ERP in the office of Supreme Leader classified in 8 factors were determined using Delphi method, and finally with approval of these 8 components by experts in the Delphi method were compared by 6 decision makers from the statistical community. The weight of the factors was determined using AHP method and the factors were ranked and finally variables are prioritized by Expert Choice v11 software. In this study, the analytical hierarchy process (AHP) of raw data was analyzed using statistical techniques and the results are presented.

## 5. Research findings

**Table 1. Prioritizing the Factors Affecting the Implementation of Enterprise Resource Planning (ERP)**

Option	Weight based on AHP method	Priority number
Obligation and support of senior management	178/0	2
Project management	194/0	1
User education	126/0	5
Vision and business plan	158/0	3
Technology infrastructure	131/0	4
Participation of beneficiaries	105/0	6
Change management	064/0	7
Communications	045/0	8
Inconsistency = 0.00025		

As it can be seen, project management resources have the highest importance factor and communication has the lowest factor among the selected criteria.

First sub-question: What are the importance factors of the sub-factors of senior management's obligation and support?

**Table 2. Prioritization of factors affecting sub-factors of main factor of senior management's obligation and support of**

Option	Weight based on AHP method	Priority number
Financial support of senior management from ERP project	112/0	3
Supporting senior management from initiatives in ERP projects	225/0	2
Supporting senior management from the link between IT strategy and ERP project management among employees	663/0	1

Second sub-question: What are the importance factors of sub-factors of the project management?

**Table 3. Prioritizing project management factors**

Option	Weight based on AHP method	Priority number
Specifying the start and end date of the ERP implementation by the organization	096/0	3
Specifying the responsibilities and power of all elements and sections of the ERP plan and implementing it for the employees by organization	235/0	2
Allocating budget for design and implementation of ERP by management	669/0	1

As it can be seen, among the selected criteria, allocating budget for the design and implementation of ERP by management has the highest importance factor and specifying the start and end date of ERP implementation by the family marital status organization has the lowest factor.

Third sub-question: What are the importance factors of sub-factors of the user education?

**Table 4. Prioritization of user education**

Option	Weight based on AHP method	Priority number
Educational program for the project team of ERP implementation	667/0	1
Educational program for final users of ERP	193/0	2
Clear strategy for user education	14/0	3

Among the selected criteria: 1. Having an educational program for the ERP implementation team has the most importance factor and then having a clear strategy for user education has the lowest factor.

Fourth sub-question: What are the importance factors of the sub-factors of the business plan and vision?

**Table 5. Prioritizing factors of business plan and vision**

Option	Weight based on AHP method	Priority number
Providing a clear vision for the design and implementation of ERP by organization	592/0	1
Achieving strategic benefits through work plan by organization	215/0	2
Attention of management to organizational initiatives that is done for users	193/0	3

Providing a clear vision for the design and implementation of ERP by the organization has the highest importance factor and management attention to the organizational initiatives performed by the users has the lowest factor.

Fifth sub-question: What are the importance factors of the sub-factors of technology infrastructure?

**Table 6. Prioritizing factors of technology infrastructure**

Option	Weight based on AHP method	Priority number
Sufficient resources from IT infrastructure	615/0	1
Sufficient resources from network infrastructure	255/0	2
Organization's attention to security issues	13/0	3

Having sufficient resources from IT has the most importance factor and the attention of the organization to household security issues has the lowest factor.

Sixth sub-question: What are the importance factors of sub-factors of participation of beneficiaries?

**Table 7. Prioritizing factors of participation of beneficiaries**

Option	Weight based on AHP method	Priority number
Effective communication in expanding the goals of ERP systems at all administrative levels of the organization	47/0	1
Inter-departmental communication to remove defects in ERP design and	301/0	2

implementation		
The importance of communication to improve the design and implementation of ERP practices by recognition of senior management	228/0	3

Effective communication in expanding the goals of ERP systems at all administrative levels of the organization has the highest importance factor and the importance of communication to improve the design and implementation of ERP procedures by the recognition of senior management has the lowest factor.

Seventh sub-question: What are the importance factors of sub-factors of change management?

**Table 8. Prioritizing change management factors**

Option	Weight based on AHP method	Priority number
The flexibility needed to implement an ERP system in an organization	639/0	1
Possibility of restructuring the organization to implement ERP	213/0	2
The possibility of changing policies and guidelines to match the organization with ERP implementation	148/0	3

The flexibility to apply ERP system in an organization has the highest importance factor and applying change in policies and guidelines to match the organization with the implementation of ERP has the lowest factor.

Eighth sub-question: What are the importance factors of the sub-factors of communication?

**Table 9. Prioritizing communication factors**

Option	Weight based on AHP method	Priority number
The flow of information between the team and the end user in the organization	551/0	1
Plans in the field of communication to implement the ERP project	317/0	2
Organizational communication between senior managers and the project team	132/0	3

The flow of information between the team and the final user in the organization has the highest factor and the organizational communication between the senior managers and the project team has the lowest factor.

## 6. Discussion and conclusion

What are the factors affecting the implementation of ERP in the office of Supreme Leader? According to the results of the research, it was found that factors affecting the implementation of ERP in office of Supreme Leader include obligation and support of senior management, project management, user education, business plan and vision, technology infrastructure, participation of beneficiaries, change management and communications.

In confirming this issue, Mohammad al-Sabawi (2015) in a study entitled "Critical Success Factors for Successful Implementation of Enterprise Resource Planning" state that obligation and support of senior management, project management, user education, business plan and vision, technology infrastructure, participation of beneficiaries, change management and communication affect the implementation of Enterprise Resource Planning (ERP) which is consistent with the results of this research.

The results of this study showed that prioritizing the factors affecting the implementation of ERP in the office of Supreme Leader includes project management with the highest factor and communication with the lowest importance factor. These factors are as follows: 1- Project management (0.194), 2- Senior management's obligation and support (0.178), 3- Business plan and vision (0.158), 4- Technology infrastructure (0.131), 5- User education (0.126), 6- participation of beneficiaries (0.105), 7- Change management (0.064), 8-Communication (0.045).

In confirming this issue, Mohammad al-Sabawi (2015) in a study entitled "Critical Success Factors for Success in Implementation of Enterprise Resource Planning" states that there is ranking among the factors affecting the implementation of enterprise resources planning and project management has the highest impact and communication has the least impact, which is consistent with the results of this study.

How is the weight of criteria in implementing ERP in the office of Supreme Leader?

According to the results, the weight of the criteria in implementing ERP in the office of Supreme Leader includes: 1- Project management (0.194), 2- Senior management's obligation and support (0.178), 3- Business plan and vision (0.158), 4- Technology infrastructure (0.131), 5- User education (0.126), 6- participation of beneficiaries (0.105), 7- Change management (0.064), 8- Communication (0.045).

What are the importance factor of the sub-factors of senior management's obligation and support? The strategic factor is the most important factor in senior management's obligation and support. In fact, a certain strategic policy on the implementation of ERP is essential in the office of Supreme Leader.

Previous research is consistent with the results of this study. In confirming this issue, Ahmad et al. (2015) in a study entitled "Enterprise Resource Planning (ERP) Systems in the Banking Industry: Implementation Approaches, Reasons for Failure, and How to Avoid them" state that senior

management's strategic policies and his obligation and support play a key role in the implementation of enterprise resources. Also, Mohammad al-Sabawi (2015) in another study titled "Critical Success Factors for Success in Implementation of Enterprise Resource Planning" states that strategic plans of senior management affect the implementation of ERP.

The results showed that allocating budget for design and implementation is the most important factor in project management. In fact, budgeting and allocating budget on the implementation of ERP in the office of supreme leader is essential.

Previous research is consistent with the results of this study. In confirming this issue, Vayyavur (2015) in a study titled "Challenges of Implementation of ERP and Critical Success Factors" states that project budgeting and allocation in project management affects the implementation of enterprise resource planning.

Also, in another study, Venkatraman & Fahd (2016), in a study entitled "Challenges and Success Factors of ERP Systems in SMEs in Australia" states that budget allocation in project management plays a key role in the implementation of enterprise resources planning (ERP) in the organization and it is recognized as one of the success factors in ERP implementation.

What are the importance factors of sub-factors of user education?

The results showed that educational program for the project team in design and implementation is the most important factor in user education. In fact, educational program for the project team on the implementation of ERP in the office of Supreme Leader is essential.

Previous research is consistent with the results of this study. In confirming this issue, Seo (2013) in a study entitled "Challenges in Implementation of Enterprise Resource Planning (ERP) Systems in Large Organizations: Similarities and Differences between Companies and the University Environment" that user learning has a significant impact on ERP implementation. Educational program for the project team is a key factor in the success of user education and the implementation of enterprise resource planning.

Saleh Shatat (2015) in another study titled "Critical Success Factors in Enterprise Resource Planning (ERP): An Exploratory Study in Oman" states that user education and preparation of an educational program for the project team dealing with the system has an impact on the implementation of enterprise resource planning.

What are the importance factors of sub-factors of the business plan and vision?

The results showed that providing a clear vision in design and implementation is the most important factor in the business plan and vision. In fact, providing a clear vision in the business plan on the implementation of ERP in the office of Supreme Leader is necessary.

Previous research is consistent with the results of this study. In confirming this issue, Yousaf Jamil & Qayyum (2015) in a study titled "Human Resource Investment (ERP) in Pakistani Companies: Critical Success Factors and Challenges" states that the business vision and plan affects implementation of enterprise resource planning. A clear vision causes the implementation of enterprise resources to be performed better.

Abazi Chaushi et al (2016) in a study titled "Critical Success Factors in ERP Implementation" state that the business plan and the clear vision and mission of the organization affect the success of enterprise resource planning.

What are the importance factors of sub-factors of technology infrastructure?

The results showed that the sufficient resources of information technology infrastructure in design and implementation are the most important factor in IT infrastructure. Indeed, the sufficient resources from IT infrastructure resources on implementation of enterprise resource planning in the office of supreme leader are essential.

Previous research is consistent with the results of this study. In confirming this issue, Egdair et al (2015) in a study entitled "Technology Factors, ERP System and Performance Organization in Developing Countries" state that technology infrastructure and sufficient resources of IT infrastructure affects the implementation of enterprise resource planning.

Abdelrazek (2015) in another study titled "Strategic Planning for Successful Implementation of ERP" state that the IT system and the availability of sufficient resources affect the implementation of enterprise resource planning.

What are the importance factors of sub-factors of participation of beneficiaries?

The results showed that effective communications in expanding the goals of ERP systems at all levels of the organization, in design and implementation is the most important factor in the participation of beneficiaries. In fact, effective communication as a key factor in participation of beneficiaries on the implementation of ERP in the office of Supreme Leader is essential.

Previous research is consistent with the results of this study. In confirming of this issue, Maditinos et al. (2012), in a study entitled "Factors Affecting the Effective Implementation of ERP System" state that the effective communication as a key factor in the participation of beneficiaries affects the implementation of enterprise resource planning (ERP).

Tarhini et al (2015) in another study titled "Analysis of Critical Success Factors for Implementation of Enterprise Resources from the Perspective of Beneficiaries: A Systematic Review" states that the effective communication between beneficiaries and stakeholders and their participation has an impact on the implementation of enterprise resources planning.

What are the importance factors of sub-factors of change management?

The results showed that the required flexibility to implement ERP systems in the organization is the most important factor in change management in the implementation of enterprise resource planning. In fact, the required flexibility as a key factor in change management on the implementation of enterprise resource planning is essential in the office of supreme leader.

Previous research is consistent with the results of this study. In confirming this issue, Ladewi & Mulyani (2015) in a study entitled "Critical Success Factor for the Implementation of Enterprise Resource Planning (ERP) in Planning Research Companies in Bandung" state that the required flexibility has an impact on change management on implementation of enterprise resource planning (ERP).

Altamony et al (2016) in another study, "The Relationship between Strategy Change Management and Successful Enterprise Resource Planning and Implementation (ERP): A Theoretical Perspective" states that flexibility has an impact on change management on implementation of enterprise resource planning (ERP).

What are the importance factors of the sub-factors of communication?

The results showed that the flow of information between the team and the final user is the most important factor in the communication variable in the implementation of enterprise resource planning. In fact, the flow of information between the team and the final user as a key factor in communications on the implementation of ERP in office of Supreme Leader is essential.

Previous research is consistent with the results of this study. In confirming this issue, Seo (2013) states in a study titled "Challenges in Implementing Enterprise Resource Planning (ERP) Systems in Large Organizations: Similarities and Differences Between Companies and the University Environment" that increasing communication affects the implementation of enterprise resources process (ERP). The flow of information between the team and the final user affects the implementation of enterprise resource planning.

Abu-Shanab et al (2015) in another study titled "Critical Factors of Success for ERP Implementation: Case Study: Jordan," state that communication is one of the key factors affecting ERP implementation. The flow of information between the team and the final user affects the implementation of enterprise resource planning.

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## 7. Research suggestions

Increasing senior management's support from the relationship between IT strategy and ERP project management among employees, increasing financial support of senior management from ERP project, increasing support of senior management from ERP initiatives and innovations in ERP projects , specifying start and end date of ERP implementation by the organization, specifying the responsibilities and power of all the elements and sections and the ERP plan and implementing it for employees by the organization, allocating funds to design and implement ERP by the management, educational program for ERP implementation project team, educational program for ERP final users , a clear strategy for user education, providing a clear vision for designing and implementing ERP by the organization, achieving strategic benefits through the work plan by organization, paying attention of management to organizational initiatives performed by users, sufficient IT infrastructure resources, sufficient resources from network infrastructures, the organization's attention to security issues, the effective communication in expanding the ERP systems' objectives across all administrative levels of the organization, increasing communications of beneficiaries to improve the design and implementation of ERP procedures by recognizing senior management.

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