

CRITICAL SUCCESS FACTORS FOR ENTERPRISE RESOURCE PLANNING IMPLEMENTATION SUCCESS

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ABSTRACT

Many organizations across the world have been adopted ERP implementation and has become a key business driver in today's world, but ERP implementation success rates are unsatisfactory and still remain very low. Therefore, these issues have been investigated by many researchers all over the world to identify the critical success factors. These the study it is necessary to can be used as a theoretical foundation upon which to base decision-making and strategic thinking about ERP implementation. This paper proposes a new framework for critical factor success for Cihan University analysis. Therefore, the purpose of this the study is to describe critical success factors for ERP implementation for empowering Cihan university of investigation of the success in has been adopted this is the projects .These the study has been building by focusing on checklist and group of interviews to specific data collection form sample in Cihan university .The findings of the checklist confirmed the importance of the critical success factors of Cihan university in adopting ERP.

KEYWORD: Critical Success Factors, Enterprise Resource Planning

I. INTRODUCTION

ERP (Enterprise Resource Planning) are integrated sets of software developed to share data across the organization for reducing redundant business processes. These systems are deployed in an organization to streamline the its functions .Modern ERP solutions are developed by combining the best industry practices and processes and are delivered by the ERP vendors SAP, Oracle, Microsoft Dynamics and Baan, they are COTS (Commercial off-the-shelf) solutions .These off-the-shelf solutions are deployed by organizations according to their needs; COTS solutions cover all the business processes within the organizations. Davenport (1998) notes that "ERP is not a project; it is a way of life. ERP system does not change anything, however the organization has to change the way of working". ERP system implementation is a very complicated process as it can take long time with a lot of planning and consultation .According to Ibrahim (2010) ERP is implemented in stages "It is thus argued that the stages of ERP implementation can be characterized as a journey with six stages". Post implementation is the last stage of ERP project and it starts after Go-live date of ERP implementation project. ERP system implementation is a highly complicated task and broad in scope for many larger organizations and it could be tremendously complex. It takes months to implement ERP system and years to get required benefits from the system. However these benefits are not easy to claim as organizations face numerous problems during and after the implementation of the system. ERP systems are hard to implement with high rates of failures "three quarters of the ERP projects are considered failures and many ERP projects ended catastrophically" (Rasmy et al 2005, p.1). Therefore, have paved the way for a chase from both academicians and practitioners to understand and pinpoint the critical success factors that positively impact this type of projects' success. Research has been done for ERP implementations in numerous environments but there is a serious gap in the literature regarding implementations in the Developing countries context In particular Iraq .

The present paper is part of a research effort that aims to contribute to understanding the phenomenon of ERP implementations and evaluations in HEIs (Cihan university) in the Iraq ; The main aim of this

paper to investigate the critical success factors of ERP implementation projects in Cihan university at Iraqi . The main research question of this study is: “What are the key critical factors for ERP implementation success in a Cihan university”? The paper is structured as follows. First, a brief literature review introducing ERP systems and the adoption of ERP systems in the HEIs. Next, the research method is presented, followed by an introductory overview of the case site under investigation. Subsequently, the findings are presented. Finally, the conclusions and the implications for further research are outlined.

II. RESEARCH QUESTIONS AND OBJECTIVES

This paper is the first to explore the factors that influence the success and failure of ERP systems in Cihan university . an instrument was developed and used to measure perceptions of sample at Cihan university in relation to the major success factors. Based on that, the study will try to answer two main questions:

1. “What are the critical factors for ERP implementation success in a Cihan university?”
2. What are the KCSFs (Key Critical Success Factors, most preferred CSFs) that should be taken into high priority for the successful ERP implementation in a Cihan university and how they are ranked by sample?

Based on the above explained research problem and the literature available the following objectives have been listed

1. To explore the CSFs for the successful ERP implementation in public sector at Iraq.
2. To rank the CSFs based on their importance for successful ERP implementation in a Cihan university?.

III. LITERATURE REVIEW

Our literature review focused on two major issues; (A) ERP and (B) critical success factors.

3.1 Enterprise Resource Planning (ERP)

Enterprise resource planning (ERP) is a software suite that integrates back-office operations such as manufacturing, finance, accounting, sales, distribution and human resources in an enterprise and links these operations to the front-office and supply chains (Lall, 2006)(Woo, Hong Seng,2007, 431)(Usman & ahmad,2012,22).The ERP system has been shown to be able to provide significant improvements in efficiency, productivity and service quality, and to lead to a reduction in service costs as well as to more effective decision-making, improvement in information flow, rapid generation of financial information, promotion of e-commerce, and assistance in development of new organizational strategies are common benefits of successful ERP implementation .ERP began in the 1960s as material requirements planning (MRP) and, later, developed into a more advanced system called MRP II. Nowadays, the latest generation of ERP systems is more advanced and more effective in dealing with multiple business units including sales and operations planning, inventory/materials management, manufacturing, purchasing, order processing, accounting and finance, human resources, customer relationship management, and more .

Given a wide range of benefits in terms of functionality, many businesses believe the ERP system can deliver strategic competitive advantages. Therefore, it is not surprising that many organizations have already adopted ERP systems (E.W.T. Ngai et al., 2008, 549)(T.H. Davenport, and J. D. Brooks,2004,11).ERP systems provide firms with two new and different types of functionality: a transaction processing function, allowing for the integrated management of data throughout the entire company, and a workflow management function controlling the numerous process flows within the company. ERP facilitates the flow of information between all the processes in an organization (Garg, Poonam,2010,2).According (Davenport, 1998) An enterprise resource planning system is a packaged software system that enables a company to manage the efficient and effective use of resources (materials, human resources, finance, etc.) by providing a total, integrated solution for its information-processing needs. An ERP system supports a process-oriented view of an enterprise and standardizes business processes across the enterprise. Although ERP systems can bring competitive advantage to organizations, the high failure rate in implementing such systems is a major concern (Nah& et.al.,

2003,6) A comprehensive definition adopted from Klaus, Rosemann, and Gable (2000: 141), is used in this study, where ERP systems are perceived as “comprehensive packaged software solutions seek to integrate the complete range of a business's processes and functions in order to present a holistic view of the business from a single information and IT architecture”.

They can link different areas of an organization, such as manufacturing, order management, financial systems, human resources, suppliers and customers, into a tightly integrated system with shared data and visibility (Rabaa'i, 2009,134). Despite the significant benefits that are associated with the implementation of an ERP system, there are many drawbacks recognised in the implementation process. The main aim of ERP system implementations in universities has been to integrate different administrative functions into a more systematic and cost effective approach to gain a strategic advantage. The integration of administrative functions in the universities spans the integration of student administration, human resource management, facilities management, and financial systems that have in the past been supported by separate legacy systems (Zornada and Velkavrh, 2005). The main advantages of ERP for HEIs are (1) improved information access for planning and managing the institution, (2) improved services for the faculty, students and employees, (3) lower business risks, and (4) increased income and decreased expenses due to improved efficiency(Rabaa'i, 2009,135). Although of the many benefits of ERP for universities, but the ERP implementation process is still difficult and complex.

3.2 Critical success factors

Bullen and Rockart (1981) define critical success factors (CSFs) in IS as the few key areas of activity in which favorable results are absolutely necessary for a particular manager to reach his goals. Successful managers must focus their scarcest resource, their time, “on those things that make a difference between success and failure (Bradley, Joseph, 2008, 178). The CSFs of ERP are those conditions that must be met in order for the implementation process to occur successfully (S. Finney, and M. Corbett, 2007, 334). ERP implementation success often results from a number of factors, such as user participation and involvement in systems development, assessment of business needs, processes during the analysis phase of the project and the level of data integration designed into the system. ERP changes these processes from designing a custom system to accommodate the existing business processes of a firm to selecting a packaged application system that best meets the firm's needs. CSFs for ERP systems can be expected to differ from other IS projects because of these changed conditions (Bradley, Joseph, 2008, 178). In order to identify the factors that affect the success or failure of ERP projects, several case studies, surveys, and literature reviews have already been conducted by a number of researchers (e.g., Plant, and Willcicks , 2007 ; Yingjie ,Jiang , 2005; Jafari,*et.al*,2006) shown in table (2).

Table 1: Review of Critical Success Factors for Enterprise Resource Planning (ERP) Implementation

Success Factors	Literature
Commitment and support of top management	(Plant, and Willcicks , 2007 ; Yingjie ,Jiang , 2005; Jafari, <i>et.al</i> ,2006; Garg , 2010; ALdayel and Al-Mudimigh , 2011; Bhatti, , 2002; Ganesh and Mehta, 2010)
Project management	(Yingjie ,Jiang , 2005; Jafari, <i>et.al</i> ,2006; Garg , 2010; ALdayel and Al-Mudimigh , 2011; Bhatti, , 2002; Ganesh and Mehta, 2010)
User training and education	(Yingjie ,Jiang , 2005; Garg , 2010; ALdayel and Al-Mudimigh, 2011; Bhatti, , 2002; Ganesh and Mehta, 2010)
Business Plan and Vision	ALdayel and Al-Mudimigh , 2011; Bhatti, , 2002; Ganesh and Mehta, 2010)
Technological infrastructure	(Bhatti, , 2002; Ganesh and Mehta, 2010; Frimpon, 2012; Ijaz, <i>et.al</i> ,2014)
Departments(Stakeholder) participation	(ALdayel and Al-Mudimigh , 2011; Frimpon, 2012)
Change Management	(Plant, and Willcicks , 2007; Bhatti, , 2002; Ganesh and Mehta, 2010)
Communication	(Jafari, <i>et.al</i> ,2006; Bhatti, , 2002; Ganesh and Mehta, 2010; Seo, 2013)

Therefore, we can say that the critical success factors for the success of ERP implementation are as follows: Commitment and support of top management, Project management, User training and

education, Business Plan and Vision, Technological infrastructure, Departments (Stakeholder) participation, Change Management, Communication, and as illustrated as follows:

1. **Commitment and support of top management:** Top management support – the ERP implementation was in general a top-down decision and the success of such an implementation depended on the alignment of the ERP adoption with strategic business goals (Yingjie, 2005). Top management support has been consistently identified as the most important and crucial success factor in ERP system implementation projects. Top management to provide the necessary resources and authority or power for project success. Top management support in ERP implementation has two main facets: (1) providing leadership; and (2) providing the necessary resources. To implement ERP system successfully, management should monitor the implementation progress and provide clear direction of the project. They must be willing to allow for a mindset change by accepting that a lot of learning has to be done at all levels, including themselves (Bhatti 2002).
H1: Top management support and Commitment will have a positive effect to ERP implementation success
2. **Project management:** Project Management involves the use of skills and knowledge in coordinating the scheduling and monitoring of defined activities to ensure that the stated objectives of implementation projects are achieved. The formal project implementation plan defines project activities, commits personnel to those activities, and promotes organizational support by organizing the implementation process (Bhatti 2002) (ALdayel and Al-Mudimigh, 2011).
H2: Effective Project management will have a positive effect to ERP implementation success
3. **User training and education:** When the ERP system is up and running it is very important that the users be capable to use it, hence they should be aware of the ERP logic and concepts and should be familiar with the system's features (Yingjie,2005). (Jafari,*et.al*,2006) Stated that there are three aspects concerning the contents of training are: Logic and concept of ERP, Features of the ERP system software, Hands- on training.
H3: Training and education will have a positive effect to ERP implementation success
4. **Business Plan and Vision:** The business must have clear visions and business plan for ERP project. It is very important to identify goal before implement ERP project. Business plan reflect a long term vision. Clear vision and mission provide the guideline for ERP implementation (Tsai,*et.al*,2011).Nah (2003) stated that one of the biggest problems ERP project leaders face comes not from the implementation itself, but from expectations of board members, senior staff, and other key stakeholders. It is important to set the goals of the project before even seeking top management support. Many ERP implementations have failed as a result of lacking clear plans (Al-Fawaz,*et.al*,2008).
H4: Business Plan and Vision will have a positive effect to ERP implementation success.
5. **Technological infrastructure:** management must make a careful choice of an ERP package that best matches the legacy systems, e.g. the hardware platform, databases and operating systems(Yingjie,2005) (Frimpon, 2012). (Bhatti 2002) argued that adequate IT infrastructure, hardware and networking are crucial for an ERP system's success. It is clear that ERP implementation involves a complex transition from legacy information systems and business processes to an integrated IT infra-structure and common business process throughout the organization. Hardware selection is driven by the firm's choice of an ERP software package. The ERP software vendor generally certifies which hardware (and hardware configurations) must be used to run the ERP system. This factor has been considered critical by the practitioners and as well as by the researchers.
H5: Technological infrastructure will have a positive effect to ERP implementation success.
6. **Departments (Stakeholder) participation:** During the implementation phase there are different partners involved such as consultants and software and hardware vendors. An adequate partnership between them will ease achievement of the goals defined (Frimpon, 2012).
H6: Stakeholder will have a positive effect to ERP implementation success.
7. **Change Management:** Role of Change Management are Change the dynamics of the organization to ensure the new system succeeds by ensuring there is readiness to the demands

of a very hard taskmaster, Educate users in current industry best practices and vigorously train them in the technical uses of the system, An ERP implementation project is a long and arduous endeavor. Sporadic and unfocused commitment to the project can doom it (Frimpon, 2012).

H7: Change Management will have a positive effect to ERP implementation success.

8. **Communication:** Strong communication within the entire organization during the implementation process increases success for ERP implementation. It allows the organization’s stakeholders to understand the goal and the expected benefits of the project as well as to share the progress of the project. An “open information policy” protects the various communication failures for the project (Seo, 2013).

H8: Communication will have a positive effect to ERP implementation success

IV. RESEARCH METHODOLOGY

4.1 Data Collection

The research steps including MIS Literature review, factors extraction, Extracting factor assessment questions, data collection, data analysis, and finally Conclusions . The questionnaire used for data collection contained scales to measure the various factors on influence the success of ERP systems in Cihan university. The questionnaire was designed after a preliminary observation on the practice and reviewing the available literature. The researchers circulated the research questionnaire among the parties that had the ability and knowledge to answer it. The survey instrument asked the experts to rate the impact of 8 identified factors of ERP success using expressions relevant.

A set of a questionnaire was created which contained a total of 24 questions (see appendix). The categorized the questionnaire under the following dimensions according to their functions and goals:

- Commitment and support of top management (question 1-3)
- Project management (question 4-6)
- User training and education (question 7-9)
- Business Plan and Vision (question 10-12)
- Technological infrastructure (question 13-15)
- Departments(Stakeholder) participation (question 16-18)
- Change Management (question 19-21)
- Communication (question 22-24)

The questionnaire used for data collection contained scales to measure ERP success using items (1 = disagree, 2 = Neither agree nor disagree , 3 = agree).

4.2 Data Analysis

4.2.1 Analysis of Descriptive Statistics

A descriptive analysis of the data in the following section

1. Commitment and support of top management

Table (2) shows the respondents about Commitment and support of top management , indicates that general mean(Average) is (4.0) which is equal than arithmetic mean that is (4). Variables of this factor achieved mean between (3.53) and (4.333). variable (Top management support initiative of ERP project) was on top rank with mean (4.333) and standard division (1.230). Whereas variable (Existence of communicating IT strategy for all employees in the organization from top Management to ERP project) was with smaller mean (3.53) and with standard division (1.073).

Based on the above, support and Commitment of Top management will have a positive effect to ERP implementation success.

Commitment and support of top management	Number	Variables	Rank	% Response			Mean	S.D
				Rating Scale				
				3	2	1		
	1	X1	2	69	16	16	4.166	1.267
	2	X2	1	76	8	16	4.333	1.230
	3	X3	3	26	58	16	3.53	1.073
general mean(Average)							4.0	1.223

2. Project management

Table (3) shows the respondents about Project management, indicates that general mean(Average) is (4.750) which is higher than arithmetic mean that is (4). Variables of this factor achieved mean between (4.833) and (4.834). Variable (The management allocate of a budget of ERP igning anddes implementation.) was on top rank with mean (4.834) and standard division (0.577). Whereas variable (Our organization determines the starting and finishing dates of ERP implementation) was with smaller mean (4.583) and with standard division (0.996).

Based on that, Project management practices will have a positive effect to ERP implementation success.

Project management	Number	Variables	Rank	% Response			Mean	S.D
				Rating Scale				
				3	2	1		
	4	X4	3	83	8.3	8.3	4.583	0.996
	5	X5	2	91.7	8.3	-	4.833	0.577
	6	X6	1	91.7	8.3	-	4.834	0.577
General mean(Average)							4.750	0.716

3. User training and education

Table (4) shows the respondents about User training and education, indicates that general mean(Average) is (3.888) which is less than arithmetic mean that is (4). Variables of this factor achieved mean between (2.833) and (3.166). variable (Existence of clear strategy for education and training) was on top rank with mean (3.166) and standard division (1.403). Whereas variable (Existence of training program for ERP implementation project team.) was with smaller mean (2.833) and with standard division (1.337). In general, Training and education will have not a positive effect to ERP implementation success.

User training and education	Number	Variables	Rank	% Response			Mean	S.D
				*Rating Scale				
				3	2	1		
	7	X7	3	25	8	67	2.833	1.337
	8	X8	2	25	81	66	2.836	1.337
	9	X9	1	33.3	16.7	50	3.166	1.403
General mean(Average)							3.888	1.359

4. Business Plan and Vision

Table (5) shows the respondents about Business Plan and Vision, indicates that general mean(Average) is (4.166) which is higher than arithmetic mean that is (4). Variables of this factor achieved mean between (3.250) and (4.833). variable (Existence Our organization aims to achieving strategic advantage through the work plan.) was on top rank with mean (4.833) and standard division (0.577). Whereas variable (Our organization pays attention to initiatives and proposals submitted by project users) was with smaller mean (3.250) and with standard division (1.356).

Based on the above, Business Plan and Vision will have a positive effect to ERP implementation success

Business Plan and Vision	Number	Variables	Rank	% Response			Mean	S.D
				Rating Scale				
				3	2	1		
	10	X10	2	75	16.7	8.3	4.416	1.083
	11	X11	1	91.7	9.3	0	4.833	0.577
	12	X12	3	33.3	25	41.7	3.250	1.356
General mean(Average)							4.166	1.005

5. Technological infrastructure

Table (6) shows the respondents about Technological infrastructure, indicates that general mean(Average) is (4.027) which is higher than arithmetic mean that is (4). Variables of this factor achieved mean between (3.750) and (4.583). variable (The security issues are interest of our organization.) was on top rank with mean (4.583) and standard division (0.996). Whereas variable

(Existence of adequate resources of IT infrastructure.) was with smaller mean (3.750) and with standard division (1.138

Based on that , Existence of adequate resources Technological infrastructure that will have a positive effect to ERP implementation success

Departments (Stakeholder) participation	Number	Variables	Rank	% Response			Mean	S.D
				Rating Scale				
				3	2	1		
	16	X16	2	75	8	17	4.333	1.230
	17	X17	3	67	25	8	4.250	1.138
	18	X18	1	92	0	8	4.750	0.866
General mean(Average)							4.443	1.078

7. Change Management

Table (8) shows the respondents about Change Management , indicates that general mean(Average) is (4.222) which is higher than arithmetic mean that is (4). Variables of this factor achieved mean between (4.166) and (4.253). variable (The possibility to change policies and instructions to suit ERP implementation) was on top rank with mean (4.253) and standard division (1.350). Whereas variable (Existence of required flexibility in the administration system to apply ERP system) was with smaller mean (4.166) and with standard division (1.267)

Based on that. Change Management will have a positive effect to ERP implementation success

Change Management	Number	Variables	Rank	% Response			Mean	S.D
				Rating Scale				
				3	2	1		
	19	X19	2	67	25	8	4.250	1.138
	20	X20	3	66	25	9	4.166	1.267
	21	X21	1	75	0	25	4.253	1.350
General mean(Average)							4.222	1.251

8. Communication

Table (9) shows the respondents about Communication, indicates that general mean(Average) is (4.497) which is higher than arithmetic mean that is (4). Variables of this factor achieved mean between (4.166) and (4.833). variable (Existence plan of Communications for ERP project implementation.) was on top rank with mean (4.833) and standard division (1.477). Whereas variable (Existence flow of information between the team and end user) was with smaller mean (4.0) and with standard division (1.358)

Based on the above, Communication practices will have a positive effect to ERP implementation success

Communication	Number	Variables	Rank	% Response			Mean	S.D
				Rating Scale				
				3	2	1		
	22	X22	3	67	0	33	4.0	1.358
	23	X23	1	92	8	0	4.833	1.477
	24	X24	2	84	16	0	4.666	0.577
General mean(Average)							4.497	1.137

4.2.2 Rank of critical success factor

The means of the 8 CSFs were ranked from largest to least.

Table 10. The means and standard deviations of the list of CSFs

#	Critical success factor (CSF)	Rank	Mean	S.D
1	Project management	1	4.750	0.716
2	Technological infrastructure	2	4.583	0.996
3	Communication	3	4.497	1.137
4	Departments(Stakeholder) participation	4	4.443	1.078
5	Change Management	5	4.222	1.251
6	Business Plan and Vision	6	4.166	1.005
7	Commitment and support of top management	7	3.944	1.223
8	User training and education	8	3.888	1.359

4.2.3 Factor analysis

A number of variables have been identified in the literature affecting the ERP implementation success. This study attempted to understand the underlying dimensions of critical success factors contributing to ERP implementation success. Factor analysis was chosen to help categories the indentified CSF into a set of uncorrelated dimensions with a minimum loss of information. With factor analysis, the researcher can first identify the separate dimensions of the structure and then determine the extent to which variables is explained by each dimension. In summarizing the data, the factor analysis derives underlying dimensions that, when interpreted and understood, describe the data in a much smaller number of concepts than the original individual variables. It is believed that the findings factor analysis in this context is valuable for both research and practice as it help researchers and managers to be more focused and address the key areas more effectively.

Table 11 , shown contained 6 factors with eigenvalues of above 1.0

% of variance	Eigenvalues	factors
23.453	5.389	1
21.907	5.258	2
17.962	4.311	3
16.586	3.981	4
8.761	2.103	5
8.508	2.042	6

After six dimensional factors were extracted from factor analysis, the six dimensional CSF are named based on the area of the variables within each dimension. The six dimensional CSF are categorized as: Factor (1). Commitment and support of top management interpreted (23.453) of the all data and its Eigenvalues (5.389). This factor includes three variables (X1, X2, X3). The (X3) variable has loading (0.935) and it is the one that contributed the most in increasing this factor. Factor(2). Project management encompasses three variables (X4, X5, X6) that explained (21.907) of the variance. X4 variable has loading (0.811) and it is improve this factor . Factor (3). User training and education interpreted (17.962) of the all data and its Eigenvalues (4.311). Factor (5). Technological infrastructure interpreted (8.761) of the all data and its Eigenvalues (2.103). X15 variable has loading (0.941) that contributed improve the factor. Factor (6). Commitment and support of top management interpreted (8.508) of the all data and its Eigenvalues (2.042). This factor includes three variables (X18, X19, X20). The (X20) variable has loading (0.975) and it is the one that contributed the most in increasing this factor.

4.2.4 Recommendation for Future Work

Future research however needs to be extended to other industry sectors in order to generalize the results, also what cultural differences exist between ERP implementation in developed and developing countries and how they effect to ERP implementation success.

V. CONCLUSION

This paper has discusses the critical success factors of ERP implementations in Cihan university. Extensive literature review was conducted to establish initial understanding of ERP implementation success and associated critical success factors. ERP have been recognized. 8 CSFs in relation to ERP implementations in high education sector at developing countries. Where identified and these are Commitment and support of top management, Project management, User training and education, Business Plan and Vision, Technological infrastructure, Departments(Stakeholder) participation, Change Management and Communication. A questionnaire was designed to collect primary data of CSF which influence ERP implementation success. Descriptive and factor analysis were conducted using SPSS. Our analysis from during the Descriptive Statistics (Mean, standard deviation) and factor analysis of critical success factors for ERP implementation success was found that the most of factors have been accepted , But the most important success factors was ERP implementation success are Project management, Technological infrastructure and Commitment and support of top management . This study has contributed to academic research by producing the empirical evidence to support the theories of CSFs and ERP implementation success at higher education at iraq. Understanding these factors is critical for the progression of the field in both academia and practice, therefore, providing a strong foundation of CSFs for further research in ERP implementation is very essential. All of these eight aspects are important to be aware of and managed in order to ensure the success of ERP initiatives in developing countries.

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APPENDIX

The scale	Disagree	Neither agree nor disagree	Agree			
Weight	1	3	4			
R	Questions			1	2	3
Commitment and support of top management						
1	Existence of financial support from top management to ERP project.					
2	Top management support initiative of ERP project.					
3	Existence of communicating IT strategy for all employees in the organization from top Management to ERP project.					
Project management						
4	Our organization determines the starting and finishing dates of ERP implementation					
5	etermines the responsibilities and power of all ERP The management d designing and implementation parties					
6	The management allocate of a budget of ERP designing and implementation.					
User training and education						
7	Existence of training program for ERP implementation project team.					
8	Existence of training program for ERP end users.					
9	Existence of clear strategy for education and training.					
Business Plan and Vision						
10	Your organization outlines a clear vision for ERP designing and implementation					
11	Our organization aims to achieving strategic advantage through the work plan.					
12	The management pays attention to initiativ Our organizationsubmitted by project users					
Technological infrastructure						
13	Existence of adequate resources of IT infrastructure.					
14	Existence of adequate resources of networking infrastructure.					
15	The security issues are interest of our organization.					
Departments(Stakeholder) participation						
16	Effective communications spreads the aims of ERP system to all administration levels of the firm					
17	Top management realizes the importance of communication to improve ERP designing and implementation procedures					
18	Communications between the departments help determine defects in ERP designing and implementation					
Change Management						
19	Existence of required flexibility in the administration system to apply ERP system					
20	The possibility to modify the organization structure to suit ERP implementation					
21	The possibility to change policies and instructions to suit ERP implementation					
Communication						
22	Existence flow of information between the team and end user.					
23	Existence plan of Communications for ERP project implementation.					
24	Existence of Communications between top management and the project team					