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Human Resource Information System and Management Maturity

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ABSTRACT

This study evaluates the use of human resources information system in the executive agencies of Zabol city and its relationship with the management maturity of organizations. Therefore, the aspects of human resources information system are: organizational analysis, database, information management, and systemic perspective; in addition the aspects of management maturity are measured based on 4 dimensions: emotional, intellectual, professional, and social maturity. The statistical population of this survey contains all managers and one of the assistants of administrative agencies in the city of Zabol. There are 65 administrative units and the number of statistical population is 130 people including a deputy and a director. Sampling is not done in this research and all the managers and their deputies are selected as the sample size and the sample size is equal to the number of statistical population. Data collection tools for this study include two questionnaires of human resources information system and the management maturity and the validity and reliability of human resources information system are89% and 78% respectively; and the validity and reliability of management maturity were equal to 86% and 78%. In order to describe and analyze the data collected through the questionnaires, different types of frequency distribution tables, various charts, coefficient of determination (r2), median and mean, Pearson correlation test, test, and independence test and etc. are used and all statistical analyses are done by computer and Spss software. Data analysis reflects this fact that:
Managers' scores of management maturity, which indicates a direct relationship between these two variables, will be increased by increasing the scores of human resource information system which includes the components of organizational analysis, database, information management, systemic perspective). As the research results indicate that there is a significant relationship among the human resources information system and the level of management maturity and two of its components including the professional and social maturity in the executive agencies of Zabol city. Thus, the more the use of human resources information system is increased, the more the rate of management maturity is increased.

KEYWORDS: System; data; information system; management information system; human resources information system; maturity; management maturity.

INTRODUCTION

Industrial development and emergence of new technology have created high capabilities in the modern life. These capabilities have been considered as the revolution in the human' life (Sorayaei et al, 2:1385).

Information is a necessary condition for making a proper decision. Activities such as finding employees, employment, retention, manpower improving "training, evaluation, etc.", manpower planning and other components of human resources management system all need appropriate information in their proper time. There are data Flow and its specific information in each of the activities in the human resource management; and by increasing their amount and type of managers' need for information in different levels of organization the need for organizing this affair and creating the proper system is increased. The "Human Resource Management Information System" is able to be used as an extremely valuable tool to generate, organize, retain, and distribute the information of human resources to the managers of organization at various levels of decision-making. (Alavi, 1:1385)

Experiences have proved that the success or failure of organizations is directly related to their quality and effectiveness of employees' activity. Today, successful organizations have recognized that in order to compete in the global markets, they should have the human resource managers in the high level. The effective point of managers (at the operational, intermediate and strategic level) in the organization is the series of decisions which are made by them in the organization. Therefore, it is emphasized that the managers should have active employees in various decision-makings of organization. Meanwhile, the human resource managers have a significant role in the organization. Most importantly, the human resources management duty as a director of human capital of organization is changed severely by the technological (technical) revolution which has been occurred in the recent decades and especially by increasing the importance of information in directing the organizational processes (Mahmoudi, 1:1385).

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In the current era which has been known as the information and knowledge era, the main competitive advantage of organization is due to the knowledge capital. Nowadays, the largest companies in the world have acquired their superiority not in the accumulated assets due to the plants and even the huge market, but in their knowledge during their process. On this condition in the recent years, the knowledge-based activities and jobs have been grown significantly. By increasing the investments in the knowledge management, the growing need for principles and rules conducting the focused efforts can be felt in order to implement the knowledge management in the organizations (Karari et al, 1:1387).

Strategic planning of IT and informational systems are the major factors in the integration of information technology in an organization for increasing the competitive advantage. According to the conducted studies on the topics of information systems management, the strategic planning of information systems is one of the key issues facing the company executives and the information systems professionals (Haki, 1:1386).

In today world, organizations need to perform their administrative and commercial missions by using the IT systems. Based on this, in order to create these systems, facilitating and accelerating the improvement of planning performance, designing, implementing and controlling the IT projects based on the objectives of projects, performing the objectives of projects within the framework of cost, time and improved quality are the priorities of organizations. For extracting the strengths and weaknesses of IT projects management, the maturity level of this process should be first evaluated and then we should planned for promoting to the higher levels. Therefore, the standard methods and frameworks should be found in order to better evaluate the management status of these kinds of projects (Edalatpour, 1:1388).

Issue description

The concept of human resource management was first introduced in the mid 80's and became popular; most of the academics and practitioners became enthralled and fascinated by this concept (Armstrong, translated by Arabi and Izadi, 17:1386). It can be discussed as a sub-system in the management information system of organization including the input data related to the output manpower which is used at different levels of organizational management (Alavi, 36:1379). Since about five hundred years ago, South American Indians have used the relatively comprehensive information systems which have the information databases and data processing models and have been made of thousands tied strings called the Quipus. People who have created these information systems are called the Quipuamoyus. In the mid-eighteenth century, the need for data processing has been grown. The industrial revolution transferred the main means of production from the small houses and shops to the factories. In addition, by starting the era of large plant and mass production techniques, the need for sophisticated capital goods for management has become inevitable (Barch and Grodnitzki, translated be Gheybi, 6:1371).

Nowadays, in order to in order to achieve the sustainable competitive advantage, the experts believe that the management of human resources is the most important factor; they believe that the human capital is so important due to the scarcity, being valuable, being irreplaceable, and not being imitated. Undoubtedly, a sustainable strategic advantage belongs to the organizations which could better attract, develop and retain the teams including the best and brightest human talents than others. Henry Mintzberg believes that the strategic database of organization is not located in the memory of its computers, but in the managers and employees' brain. Evolutions have indicated that the management knowledge has suggested that the human resources management was first introduced and then was turned to the human resources management and today, this important issue has changed to the human capital management. Accordingly, in the recent years, the management human capital, which severely focuses and considers the humans, has been suggested (Shafieieh, 1:1389).

In the third millennium, the progress and development of organizations and institutions depends on the access to the more accurate information with better quality as well as upgrading the level of knowledge, skill and desired behavior of human resources. Meanwhile, the phenomenon of information explosion is created and the human resource managers are often faced with the classified insufficient information, so the need for human resource information systems is manifested in order to classify the required data from the boundless sea by maintaining and improving the data quality, and makes them available for the directors (Shirvani et al, 1:1388).

Not using the proper information system is one of the problems today. The management information systems have the capability to process the information in the field of demography, education, employment, and also the factors affecting the labor supply and demand which ultimately will have numerous applications in the field of manpower planning. Managers can be prepared for facing with the critical current and future problems before starting any crisis by the required information (Kiani, 1:1388).

This is the problem. Information is very effective on different aspects. The following questions are raised: How many employees have personal residential houses? How many employees are using the tourism and pilgrimage facilities? How the statistical distribution based on the loans and number of people in its different types is done? How the statistical payment distribution of different types of employee insurance (life, supplement, house, family, and healthcare) is done? And how the distribution of received facilities from the

insurer is done (Who benefits in the organization?). These questions and many other cases including how the statistical distribution of health and disease and its causes and its associated costs, appointments in the jobs and in various positions, years of service, age, rank, grade, and ... are done? If there is no answer to the above questions, you should know that in conducting and administrating the human resources it is not clear where we are and where want to go (Asafo, translated by Hashemi-Far, 1:1386).

One of the first models of knowledge management maturity has been introduced in 1999 by Gallagher and Hazlett. This model as a tool for assessing the status quo of knowledge management in the organization can facilitate the effectiveness evaluation of strategies for knowledge management (Karari et al, 1:1387).

Several factors increase the level of management maturity; the human resources information system is one of the factors which have been less considered. Nowadays, the expansion of commercial activities, globalization and rapid changes of technology in the organizational environment have caused that they have the required flexibility in order to survive and maintain their competitive advantages. The flexibility needs rapid changes and quick changes are impossible without having the information (Mehdizadeh and Alipour, 23:1385).

Research objectives

Main objectives

Identifying and describing the relationship between the use of human resource information systems and the level of management maturity in the executive agencies of Zabol city.

Research Sub-objectives

1 - Identifying and describing the relationship between the use of human resources information system in the executive agencies of Zabol city and the level of management emotional maturity.
2 - Identifying and describing the relationship between the use of human resources information system in the executive agencies of Zabol city and the level of management intellectual maturity.
3 - Identifying and describing the relationship between the use of human resources information system in the executive agencies of Zabol city and the level of f management professional maturity.
4 - Identifying and describing the relationship between the use of human resources information system in the executive agencies of Zabol city and the level of management social maturity.
5 - Identifying and describing the relationship between the use of human resources information system in the executive agencies of Zabol city and the level of management maturity according to the mediator variables (age, education, and management experience)

Research Domain

A: Spatial domain of research:
Spatial domain of this research contains all executive agencies located in the city of Zabol.
B: Time domain of research:
This research has been conducted during 1390-1391 in the executive agencies of Zabol city.

Type of Variables

- **Predictor variable**

It is a variable by which the criterion variable is explained or predicted (Delavar 37:1384). In this study, the human resource information system is considered as the predictor variable because the researcher is trying to examine its relationship with the management maturity assessment.

- **Criterion variable**

The criterion variable is a variable which its changes depend on the changes of predictor variable (Danaei-Fard et al, 126:1383). The researcher is trying to change this variable and other effective variables to the quantitative and measurable ones; the amount of management maturity is the criterion variable in this study and the researcher is trying to determine whether this variable is affected by the human resources information system or not?

- **Mediator variable**

Mediator variable is a factor which is chosen, measured, and corrected by the researcher in order to determine whether changes in it changes the relationship between the criterion and predictor variables or not? (Delavar, 40:1384). In the present study, the age, education and experience in the management responsibilities have been considered.

B - Operational definition

- **Human resources information system:**

In this study, the human resource information system contains the components of the institutional analysis, database, information management and systemic perspective which are measured by the researcher's

questionnaire including 23 questions. The score which the subjects give to this questionnaire in the Likert scale determines the status of human resource information system.

- **Management maturity:**

In this study, the amount of management maturity includes the components of emotional, intellectual, professional and social maturity which are measured through a questionnaire including 22 questions. The score which the subjects give to this questionnaire in the Likert scale determines the status of management maturity.

An overview of others' studies

Studies conducted about the human resource information system variable in Iran

- Alavi (1379) achieved these results in a study called the human resource information system: a theoretical framework is introduced for understanding the components and application of human resource management information system in an organization and recognizing different levels of organizational management, determining the areas of decision making and data required for each level, and understanding the organizational processes are the basics for creating this system. Establishing this system equips the organization managers at any level with the needed information, and enables them to take better decisions about the most strategic resource.
- Shahi and Beik (1384) concluded in an article entitled "Reengineering the HR through the information technology" that: Despite the confusing developments in the new technology as long as the Department of Human Resources still continues to maintain its traditional methods, it is difficult to expect a fundamental change. If the Department of Human Resources is still stuck with its traditional hierarchical and functional structure, the contents presented in this article about the information technology will not be able to create any changes in these kinds of departments and the proposed principles by Smith and Taylor seemed quite right at their time because they were designed according to the technology of their own era.

Studies conducted about the human resource information system variable outside Iran

- Russell Johnston and Michael (1988) concluded in an article entitled "Creating the competitive international advantage of information system" that the system of using the information or the processing capabilities in an organization improve the performance or the relationship among the organizations.
- Pearson, Hall's student, (2004) concluded in an article entitled "the analysis process of human recourses for the company" that a database should be contains a set of employees and their skills and also the information related to the applicants outside the organization; and this system makes the flexibility and affordable pricing.
- Asafo (2007) achieved these results in an article entitled "The preparation and designing the human resource information system": The cases enumerated above are related to the interests and benefits which they have for executive system and employees in the human resources management unit. But the preparation and implementation of human resource information system makes a wide range of changes in the organization including its role in the employees' professional development, facilitating the change and innovation processes, development of cognitive skills in managers, considering and forming the researching culture in the field of Manpower, creating a standard-orientated culture, strengthening the self-controlling culture, and helping to determine the cost price in the industrial organizations, and making them realistic.
- Wikipedia (2007) concluded in an article entitled "The human resources management system" that most of the organizations develop the human resource management information system beyond their traditional tasks and support the employment, job searching, selectivity, evaluation of employees' performance, benefit analysis, health , safety, and security.
- Susan Hisfield (2007) concluded in an article entitled "The human resources" that the statistical and reporting modules of human resources unit are terrible and they are not easily adjustable; and the Human Resources Information System (HRIS) is an excellent tool to reduce the costs.
- New York Times (2010) concluded that the Human Resource Information System, Technology, Web, Internet, and the technology of changing the work are the professional human resources and increase the productivity of strategy.
- F. John Reh (2010) in an article entitled "The HR Information System" has concluded that this system saves 47%, and installing and implementing it will reduce our and governmental production costs, and has stated that the required reporting will be sent to us more quickly.

Studies conducted about the domestic maturity variable

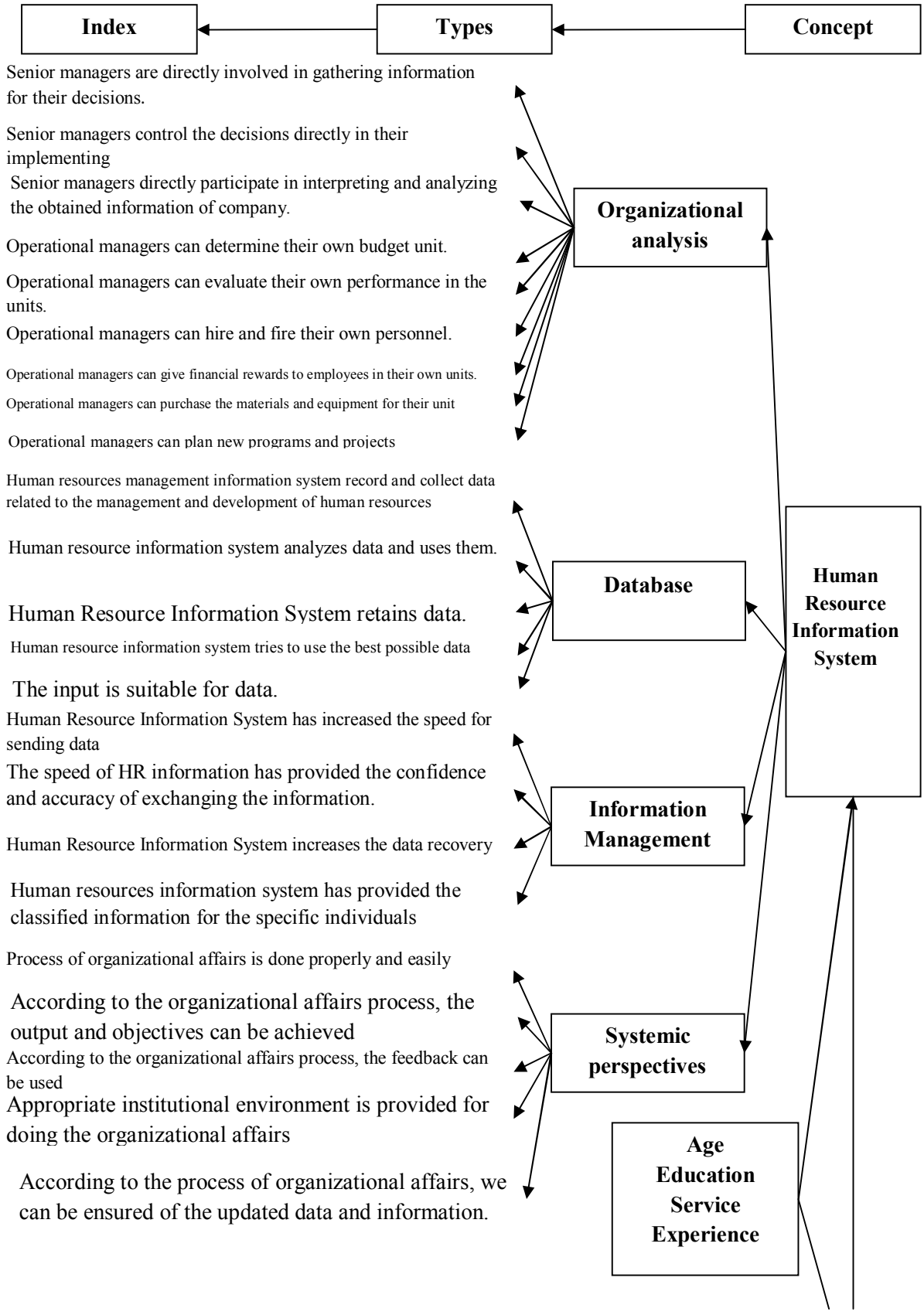
- Montazeri (1385) by reviewing the organizational Project Management Maturity Model (OPM3) achieved to these results that in the project management, there is a correlation among the project management, program management, and the portfolio management and its effectiveness in implementing the strategy. The organizational project management maturity of the organization is obtained through the study of this type of project management by the organization.

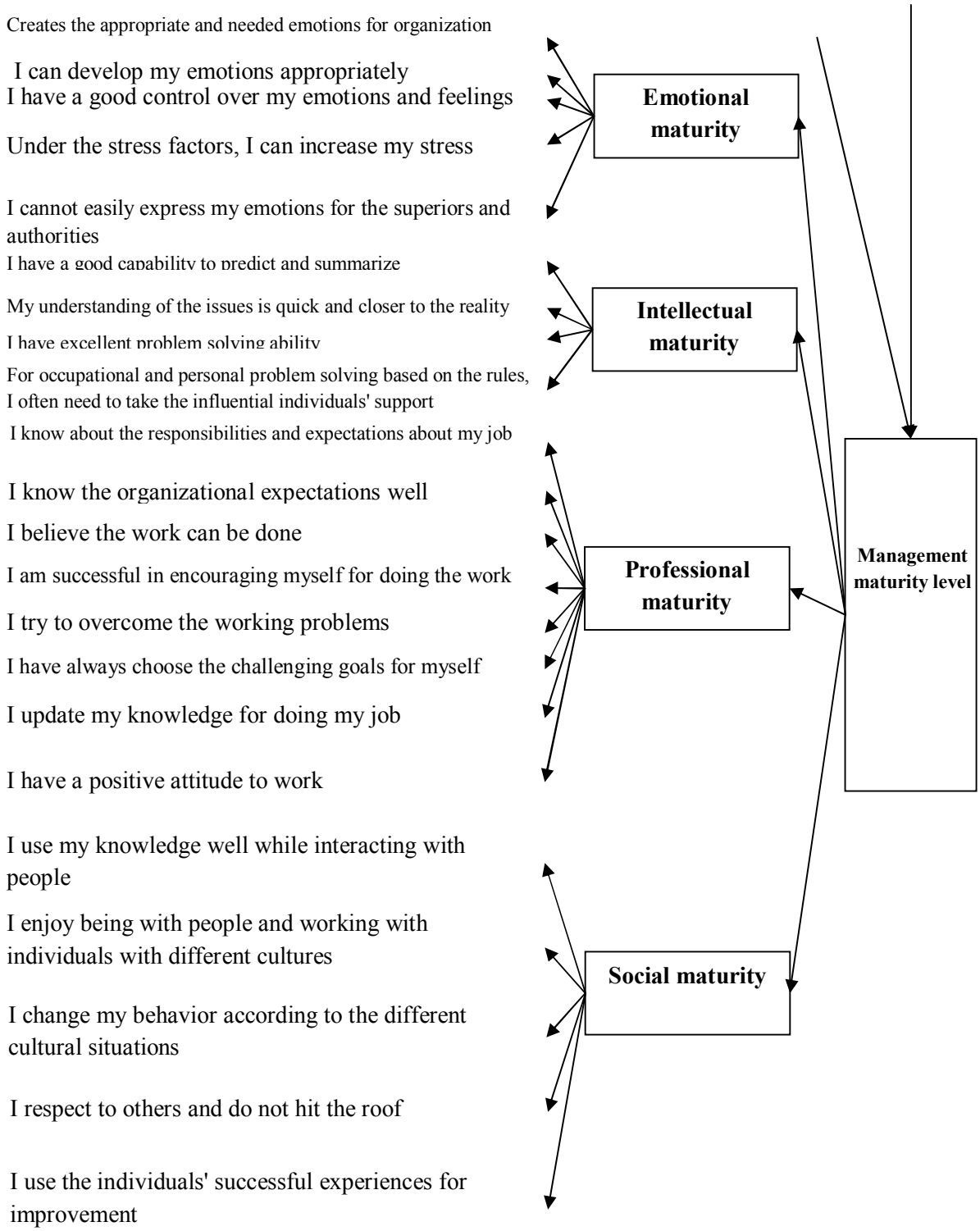
- Edalatpour (1388) concluded by providing a model for evaluation of IT project management that IT is one of the important approaches in the success of proper and effective management projects. Therefore, using the best practices about the institutionalization of models and monitoring and evaluating the related processes are the priorities. Despite the fact that the maturation of process can only be measured in terms of functionality, in this paper the measurement of all covered processes as well as a model and mapping of CoBiT (Capability of Body information Technology) and the combined PMBOK (Project Management Body of Knowledge) including the standards among them were proposed. This method makes the measurement more accurate and can better manage the organization in the status quo.

Studies conducted about the maturity variable outside Iran

1. Watts Humphrey (1987) concluded in an article entitled "The features of software process of maturity framework that: It is obvious that the software must be full and effectively in all the required duties and the tools and techniques should be used in which the skill, training and motivation of people are involved. The development process of managing the software is under the statistical control and is continually improved when the statistical control is done, but without the statistical control any progress is impossible.
2. William (2000) concluded in an article entitled "Evaluating the Management Maturity that: There is a massive emphasis on the project and budgeting and cost controlling, so that it rank will be higher than the average of understandable cost management and the amount of information and number of sent messages and timeliness of information will be considered.
3. Hoiland (2001) achieved to these results in an article entitled "The maturity models and evaluating the case studies at the Norwegian Academy of Science and Literature: Development and implementation of the random decision support model are done within an organizational framework.
4. Patrij (2006) achieved to these results in an article entitled "The maturity models": New and emerging business models, learning the way of learning, learning in order to teach, and the social responsibilities.
5. Clayton (2006) concluded in the article entitled "The maturity models" that: The public and private sector participation are the best way to improve the performance and enhance the core values and ultimately to develop the integrated facilities of management care model.
6. Ludon (2009) achieved to this result in an article entitled "What is the intellectual maturity?" that we will become more matured at the same time we are grown. Our intellectual maturity is that we think that the development of intellectual maturity is a mechanical process and in coordination with the civilized organization. Development of primary mind is arranged in harmony with the nature. So individuals' perceptions are so different due to the various understanding of details and the civilized mind, at any level of maturity, has a certain portion of real mental power.
7. Corkern (2011) concluded in an article entitled "The social maturity" that the large organizations tend to use the social technology through the common stages of change for developing the business, and this process of changing is specified as the social maturity and is changing quickly from one stage to another.

Research analytical model


Index
Types
Concept
Senior managers are directly involved in gathering information for their decisions.
Senior managers control the decisions directly in their implementing
Senior managers directly participate in interpreting and analyzing the obtained information of company.
Operational managers can determine their own budget unit.
Operational managers can evaluate their own performance in the units.
Operational managers can hire and fire their own personnel.
Operational managers can give financial rewards to employees in their own units.
Operational managers can purchase the materials and equipment for their unit
Operational managers can plan new programs and projects
Organizational analysis
Human resources management information system record and collect data related to the management and development of human resources
Human resource information system analyzes data and uses them.
Human Resource Information System retains data.
Human resource information system tries to use the best possible data
The input is suitable for data.
Database
Human Resource Information System has increased the speed for sending data
The speed of HR information has provided the confidence and accuracy of exchanging the information.
Human Resource Information System increases the data recovery
Human resources information system has provided the classified information for the specific individuals
Information Management
Process of organizational affairs is done properly and easily
According to the organizational affairs process, the output and objectives can be achieved
According to the organizational affairs process, the feedback can be used
Appropriate institutional environment is provided for doing the organizational affairs
According to the process of organizational affairs, we can be ensured of the updated data and information.
Systemic perspectives
Age
Education
Service
Experience
Human Resource Information System


Creates the appropriate and needed emotions for organization
I can develop my emotions appropriately
I have a good control over my emotions and feelings
Under the stress factors, I can increase my stress
I cannot easily express my emotions for the superiors and authorities
Emotional maturity
I have a good capability to predict and summarize
My understanding of the issues is quick and closer to the reality
I have excellent problem solving ability
For occupational and personal problem solving based on the rules, I often need to take the influential individuals' support
Intellectual maturity
I know about the responsibilities and expectations about my job
I know the organizational expectations well
I believe the work can be done
I am successful in encouraging myself for doing the work
I try to overcome the working problems
I have always choose the challenging goals for myself
I update my knowledge for doing my job
Professional maturity
I have a positive attitude to work
Management maturity level
I use my knowledge well while interacting with people
I enjoy being with people and working with individuals with different cultures
I change my behavior according to the different cultural situations
Social maturity
I respect to others and do not hit the roof
I use the individuals' successful experiences for improvement

Research Hypothesis

Research Main hypothesis

There is a relationship between the level of using the human resource information systems and the management maturity in the executive agencies of Zabol city.

Research Sub-hypotheses

1. There is a relationship between the level of using the human resources information system and the emotional maturity in the executive agencies of Zabol city.
2. There is a relationship between the level of using the human resources information system and the management intellectual maturity in the executive agencies of Zabol city.
3. There is a relationship between the level of using the human resources information system and the professional maturity level in the executive agencies of Zabol city.
4. There is a relationship between the level of using the human resources information system and the social maturity of management in the executive agencies of Zabol city.
5. There is a relationship between the level of using the human resources information system and the management maturity level in the executive agencies of Zabol city with respect to the mediator variables (age, education and managerial responsibilities experience).

RESEARCH METHODOLOGY

This research is descriptive based on the purpose, and the method of descriptive study has the correlation type which has been done based on the list of managers and deputies in the executive agencies of Zabol city.

Statistical Population

In this study, the statistics population includes all managers and deputies in the executive agencies of Zabol city, in which the number of operating machines is 65 units and the number of directors and one of their deputies is totally 130. The table corresponding to it and the number of collected questionnaires are presented in the Appendix 3.

Sample size and sampling method

Conducting any scientific research requires money and time. Therefore, researchers seek to obtain the possible information through the sampling and by analyzing the obtained data surrounding the sample, and finally they try to attribute this information to the original community by generalizing them (Khaki, 158:1382). In this study, based on the size of population, the census method has been used. However, the number 130 for the size of statistical population is not a large number especially according to the data collection tool which is a questionnaire and the non-significant cost for sampling. After distributing the questionnaires, 106 questionnaires were collected and analyzed. It should be noted that 24 people in the statistical population did not cooperate with the researcher.

Data collection tool

Two questionnaires, the human resources information system and the management maturity level, have been used in this study in order to collect data, and there they have been distributed among the statistical population and were collected after the specified deadline.

A – Determining the validity of questionnaire

Ultimately, the validity of first and second questionnaire was approved in the 89% and 86% by the common method and the content validity procedure.

B - Determining the reliability of questionnaire

In this study, the Cronbach's alpha test has been used in order to evaluate the internal consistency of questions in the questionnaire.

Table 1- Internal consistency

Cronbach's alpha	Number of questions	Number of subjects
0.781	45	10

The Cronbach's alpha coefficient is used for measuring the single-dimensional level of attitudes, beliefs and.... In fact, we would like to measure the consistency of respondents' consideration of questions.

Data analysis Methods

The following statistical methods have been used for analyzing data and presenting the study the findings:

1. Descriptive statistics: The frequency tables, bar chart and box plot. By using these tables and charts a description of managers' general features, the questions of questionnaire, and variables of research are offered.

2. Inferential statistics: The Pearson correlation has been used in this section in order to examine the hypotheses 1 to 4. In addition, the Stepwise regression method has been used in order to examine the type of relationship. Before implementing the regression, the normality of criterion variable is measured by the one-sample Kolmogorov-Smirnov test. The normality hypothesis was the same for all variables. The log-linear method has been used in order to examine the relationship between the human resources information systems and the management maturity level in the presence of mediator variables such as age, education and managerial responsibilities experience. The Spss software version 16 was used for data analysis and the significant level was considered 0.05.

Research findings

A - Summary of Research Results

- **Summary of results related to the demographic variables (Evaluating the public features)**

The studied sample in this study includes 106 people of managers and one of the deputies in 65 executive offices in the city of Zabol and contains the demographic features as follows:

- Based on the subjects' age in the sample studied, of 106 subjects, 5 subjects (4.7 percent) were 20-30 years old, 39 subjects (36.8 percent) were 30-40 years old, 52 subjects (49.1 percent) were 40-50 years old and 10 subjects (9.4 percent) were over 50 years old.
- Based on the subjects' educational status in the sample, of 106 subjects 1 subject (0.9 percent) had diploma, 5 subjects (4.7 percent) had associate degree, 75 subjects (70.8 percent) had BA degree, 20 subjects (18.9 percent) had MA degree, and 5 subjects (4.7 percent) had a Ph.D degree.
- Based on the subjects' management responsibilities experience in the sample, of 106 subjects 71 subjects (67.0 percent) had 0-10 years of experience, 29 subjects (27.4 percent) had 10-20 years of experience and 4 subjects (3.8 percent) have 20-30 years of experience. In addition, 2 subjects did not specify the status of their management responsibilities experiences.
- **Evaluating the status of management maturity variables aspects in the executive agencies in Zabol city according to the tables of frequency distribution**

Table 2- Values of descriptive indicators about the parameters of model (n=106)

Variable	Aspects	Mean	Standard deviation	Median	Skewness	Elongation	Minimum	Maximum
Management maturity	Emotional	3.86	0.63	3.80	-0.06	-0.42	2.60	5
	Rational	3.98	0.69	4.00	-0.01	-0.96	2.50	5
	Professional	4.40	0.40	4.50	-0.79	0.24	3.38	5
	Social	4.42	0.46	4.40	-0.64	-0.06	3.20	
Human Resource Information System	Institutional Analysis	3.34	0.85	3.27	0.12	-1.12	2.00	5
	Database	4.14	0.82	4.20	-1.40	2.96	1.00	5
	Information Management	4.06	0.89	4.25	-1.03	1.17	1.00	5
	Systemic perspective	3.98	0.75	4.00	-0.40	-0.49	1.80	5

- **Summary of hypothesis results**
- **Main research hypothesis: There is a relationship between the use of human resource information systems and the management maturity in the executive agencies of Zabol city.**

Table 3- Pearson correlation coefficient between the human resources information system and the management maturity level

Pearson correlation coefficient	Significance level	Total	Relationship	Type of Relationship
0.285	** 0.003	106	Yes	Direct

* At the significance level 0.05, ** At the significance level 0.01

- **Research Sub-hypothesis**
- **There is a relationship between the use of human resources information system and the level of management emotional maturity in the executive agencies of Zabol city.**

Tables 4- Pearson correlation coefficient between the human resource information system and the level of emotional maturity

Pearson correlation coefficient	Significance level	Total	Relationship	Type of Relationship
0.138	0.160	106	No	-

* At the significance level 0.05, ** At the significance level 0.01

- **There is a relationship between the use of human resources information system and the intellectual maturity level of management in the executive agencies of Zabol city.**

Table 5- Pearson correlation coefficient between the HR information systems and the level of intellectual maturity

Pearson correlation coefficient	Significance level	Total	Relationship	Type of Relationship
0.155	0.112	106	No	-

* At the significance level 0.05, ** At the significance level 0.01

- **There is a relationship between the use of human resources information system and the level of management professional maturity in the executive agencies of Zabol city.**

Table 6- Pearson correlation coefficient between the human resources information system and the level of professional maturity

Pearson correlation coefficient	Significance level	Total	Relationship	Type of Relationship
0.233	* 0.016	106	Yes	Direct

* At the significance level 0.05, ** At the significance level 0.01

- **There is a relationship between the use of human resources information system and the management social maturity in the executive agencies of Zabol city.**

Table 7- Pearson correlation coefficient between the human resources information system and the level of social maturity

Pearson correlation coefficient	Significance level	Total	Relationship	Type of Relationship
0.352	* < 0.001	106	Yes	Direct

* At the significance level 0.05, ** At the significance level 0.01

- **There is not a relationship between the use of human resources information system and the level of management maturity in the executive agencies of Zabol city with the presence of mediator variable (age, education, management responsibilities experiences).**
- **There is a relationship between the use of human resources information system and the level of management maturity in the executive agencies of Zabol city according to the age.**

If the variables of human resource information system and the level of management maturity are considered as two quantitative sequential variables, there is a way to examine the relationship between these two variables in the presence of mediator variable of age by the log-linear method. Based on the linear results for evaluating the relationship among three variables of human resource information systems, management maturity, and age, two variables of management maturity and human resources information system do not depend on the presence of age variable. It means that the age as a confounding variable cannot affect the relationship between the human resource information system and the management maturity.

- **There is a relationship between the use human resources information system and the level of management maturity in the executive agencies of Zabol city according to the education level.**

Based on the results of log-linear method for evaluating the relationship among three variables of human resource information system, level of management maturity, and the education level, two variables of maturity management and human resource information system depend on the presence of education variable. It means that the Education Level as a confounding variable can affect the relationship between the human resource information system and the management maturity.

- **There is a relationship between the use of human resources information system and the level of management maturity in the executive agencies in Zabol city according to the management responsibilities experiences.**

Based on the results of log-linear method, for evaluating the relationship among three variables of human resource information system, level of management maturity, and the management responsibilities experience, there is a relationship between two variables of maturity management and human resource information system at the presence of management responsibilities experience variable in the executive agencies of Zabol city. In fact, three variables of human resource information system, level of management maturity, and the management responsibilities experience do not depend on each other.

Movements

The maturity variable is the first variable considered in this study. The variable of management maturity is considered as the criterion variable. It is the variable which changes in it is tried to be described and

interpreted by the human resource management information system as the predictor variable. Numerous experts such as Laderro Seti (1996) have examined the human resources information system and the management maturity. In the studies related to the strategic planning of information systems, the organizational expertise in the strategic planning IT\IS and the organizational maturity in benefiting from the IT should be considered.
Studies conducted by Serpa and Werner (1998) indicate that one of the key issues in the strategic planning of information systems is that how the maturity of information systems activities are affected by the planning process. The level of maturation process of strategic planning IT\IS depends on the maturity level of information systems activities in the organization and methodologies adopted for planning the information systems. In other words, in the organizations which the maturity of information systems is at a higher level, the senior managers of organization understand the importance of strategic decision for information systems more than other organizations.

What should we do about the maturity with these numerous news of failure and without-result investments in different field? What are the ways for reducing the possibility to encounter with the delay and for increasing the costs? The IT projects have the technical nature as well as the organizational nature (Edalatpour, 1388).

The researchers obtained the results based on an article entitled "Providing the practical model for measuring the management maturity of Knowledge in the software industry. The concepts of knowledge-based organizational performance (based on the indicators of measuring the knowledge management) were discussed. Then a model including the confirmed elements and indicators in the literature of survey, in which the indices were distributed at the levels of maturity in terms of complexity, difficulty, and according to the experts' evaluation and approval, were presented. Finally, the leading manufacturer company of software in Iran was measured as a knowledge-based organization and the maturity level was specified exactly by the Knowledge Management Maturity Model, and the strategies for improving the Knowledge Management Maturity of this organization were presented in order to improve the knowledge management maturity in order to guide the upcoming research in the field of measuring the Knowledge Management Maturity in other software manufacturers companies in Iran (Sohrabi et al, 1389).

In looking at the whole organization, the human resource information system is considered as one of the information sub-systems such as the financial and accounting, manufacturing, sales and ... information systems (Asafo, translated by Hashemifar, 1:1386).

In the third millennium, the progress and development of organizations and institutions depends on the access to the more accurate information with better quality as well as upgrading the level of knowledge, skill and desired behavior of human resources. Meanwhile, the phenomenon of information explosion is created and the human resource managers are often faced with the classified insufficient information, so the need for human resource information systems is manifested in order to classify the required data from the boundless sea by maintaining and improving the data quality, and makes them available for the directors (Shirvani et al, 1:1388).

Not using the proper information system is one of the problems today. The management information systems have the capability to process the information in the field of demography, education, employment, and also the factors affecting the labor supply and demand which ultimately will have numerous applications in the field of manpower planning. Managers can be prepared for facing with the critical current and future problems before starting any crisis by the required information (Kiani, 1:1388).

The results of research have indicated that the amount of using the human resource information system has a significant effect on the level of management maturity. The reason why this effect happens is because the human resource information system increases the speed of working and easier performance for managers and other people and makes better and proper decisions. According to the results of research, the other type of management maturity is the social maturity which has been evaluated before and this kind of maturity has a direct and meaningful relationship with human resource information system based on the research; therefore this kind of maturity is considered as the best and most efficient type of this kind of maturity in the organizations, and by which the manager will understand their roles and the organization expectations and the mutual respect will be formed. According to the research findings it can be expressed that the more the organizations use the human resources information systems, the more the management leads to the maturity. This indicates that there is a significant relationship between these two variables and the findings of research are consistent with the theoretical evidences.

Research Suggestions

1. There is a relationship between the use of human resource information systems and the management maturity in the executive agencies of Zabol city. Therefore, the development of the culture of applying the computer and information system in Iran and especially in the governmental agencies is essential and necessary. Therefore, the required arrangements should be provided for using the proper training courses and the managers' contribution in these courses.
2. There is a relationship between the use of human resource information systems and the professional management maturity in the executive agencies of Zabol city. Therefore, the efficient, professional and

competent managers in the field of information systems, systems analysis, and maintenance of information systems should be employed and the incentives for retaining the existing staff be provided.

3. There is a relationship between the use of human resource information systems and the social management maturity in the executive agencies of Zabol city. Therefore, in order to enhance the level of individuals' information and knowledge the training courses should be designed and implemented for managers.

4. There is a relationship between the use of human resource information systems and the level of management maturity in the presence of mediator variable of education level. Therefore, in order to enhance the efficiency of institutions the managers with higher education level should be employed.

Conclusion

Nowadays, the organizations do not consider the IT (Information Technology) just as a facilitator for the activities and the automation of processes, but the information technology and information systems have the strategic role and the organizations try to use it for their research strategies. The atmosphere of IT is in a way under which the organizations have no choice except using it. Various factors have involved in increasing the management maturity; the human resources information system is one of the factors which are considered less. Nowadays, the expansion of commercial activities, globalization and rapid changes of technology in the organizational environment have caused that they have the required flexibility in order to survive and maintain their competitive advantages. The flexibility needs rapid changes and quick changes are impossible without having the information

The results of research have indicated that the amount of using the human resource information system has a significant effect on the level of management maturity. The reason why this effect happens is because the human resource information system increases the speed of working and easier performance for managers and other people and makes better and proper decisions. According to the results of research, the other type of management maturity is the social maturity which has been evaluated before and this kind of maturity has a direct and meaningful relationship with human resource information system based on the research; therefore this kind of maturity is considered as the best and most efficient type of this kind of maturity in the organizations, and by which the manager will understand their roles and the organization expectations and the mutual respect will be formed. In addition, the social maturity strengthens the cultural intelligence due to the individual maturity, acquires the individual capability for understanding, and changes and implements the effective action in the situations. According to the research findings it can be expressed that the more the organizations use the human resources information systems, the more the management leads to the maturity. This indicates that there is a significant relationship between these two variables and the findings of research are consistent with the theoretical evidences.

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