

Modeling the Impact of Data Transfer on the Functional Elements of Human Resource Management

Gisia Suratian¹, Sohrab Del Angizan², Seyed Reza Hasani³

^{1,3}Department of Management, Kermanshah branch, Islamic Azad university, Kermanshah, Iran

²Associate Professor in Razi University, Iran

Received: June 29, 2014

Accepted: September 15, 2014

ABSTRACT

This study is done with aim to assess the impact of data transfer on the functional elements of the human resource Management. Descriptive research method and correlational research design from structural equation modeling. Statistical population included all personnel of all branches of the Ansar bank in Kermanshah province. Standardized questionnaire was used to collect data. The sampling method is total calculation, and out of 160 distributed questionnaires among the employees, 96 were chosen to analyze data. The study data were analyzed using SPSS and AMOS software. Findings showed that IT (data transfer) is effective through speed in performance, transparency in the system design and accurate and rapid assessment and create more discipline on training, motivation and discipline. Integration of IT can be effective in improving functional elements of human resource management in organizational system and structure. In the result of this effectiveness can see efficiency increasing and organizational effectiveness.

KEYWORDS: IT, transfer canal, human resource management, Ansar bank.

INTRODUCTION

The importation of information technology in human life has brought many changes to the organizations and in addition to organization structures change, changed the nature and the role of the business sectors human resource management unit as one of the most important of organization sector is not immune from this spread changes, and nature of its functions is change from traditional state to electronic state (Jaafari et al, 2011). In several past decades technology has relative impact on processes and efforts of human resource management. For example technology helped to distinguish many of processes included design of human resource, employment, selection, performance management and work flow. These new systems, empower the human resource management to provide better services to its shareholders and executive boundary in this field is reduced (Stone & Dulebohn, 2013). Internet has revolutionized life and the ways to establish relationship with other. Fundamentally, Internet has shifted more or less all aspects of human society. In the recent years, internet and IT have increasingly developed both in commercial and private environments (especially, by an increase in the number of Internet users and Internet service). Undoubtedly, employees are organizations have been heavily influenced by Internet from different aspects (Shahvarani Nasab, 2008). Information as a nexus uses all the sciences of day in order to provide professionals, industries, organization and finally people with required information in the shortest time and the best possible way. Overall, IT has gone beyond the boundaries of world countries and gathered them in a universal community. Meanwhile, human resources management due to its critical role in organizations is also influenced by such revolutions (Pourkiani & Farah Bakhsh, 2012). A myriad of studies have shown that the added value of human resource is the most influential factor when decisions on human resource management are related to organization strategy. Scientific issue regarding the influence of strategic factors on decision processes will be limited to human resource management (Schalk, 2013). Organization managers are required to recognize the impact of IT on the human resource efficiency. Therefore, the present study aims to examine the impacts of information transfer on human management efficiency, especially training of employees, their motivation and discipline through IT transmitting channels, and consequent impacts on the efficiency of employees in Kermanshah Ansar Bank.

Information technology

To examine the concept of information, it is necessary to study the concepts of technology along with information. IT is a sub-category of technology which using hardware and software enables studying, processing and applying data by some methods such as storing, manipulating, transferring, managing, controlling and automatic data acquisition (Fathian et al., 2010). Technology is a prerequisite to process information; in this regard,

*Corresponding Author: Sohrab Del Angizan, Associate Professor in Razi University, Iran

observation, knowledge and experience are of special significance. Information emanate from data which are not obviously tangible and perceptible. When data are categorized and organized into some categories and groups, they will be converted into information, i.e. IT is a collection of instruments, techniques and methods for storing, processing, distributing and generating information (Stone and Muhanna, 2009).

by expanding new tools" application of information and communication, in recent decades world was rea of remarkable changes which leads to fundamental change in many relations and previous equation. These changes are began since computer application as automation tools and increasing productivity, and at present by creating participatory synergetic space, by entering to cyberspace, primarily changed human individual and social life (Zmud, et al.2012). Furthermore, advances in computers and communication, speeding up the exchange of information in the supply chain of goods and services. Although costs of information technology allocated remarkable portion of organizational costs of financial and human resource to itself, but due to advantages of its application include: provide communication activities, design and creativity, acquisition to education based on new tools of information and communication include video conferences, ability to access to great volume of information with fastest speed and lowest cost, provide a bed of information and communication systems to better and up to date maintenance of date for financial managers and present exact statistical analysis for product line managers, creating conditions for on-line business communication with customers, vendors and partner companies and improve these communication, most of organizations apply information technology as fundamental business tools (peeter and kallol, 2012).

In fact, data transfer or data communication simply means digital exchange of information between two devices. Information exchange must be taken into account from two perspectives including: 1) as a series of specific tasks which involves entire process of information transfer 2) as a range of tools and resources that form the foundation of information infrastructure. So, to transfer data the following principles must be taken into account: 1- Diagnosis of need to the information, 2) recognizing necessary information, 3) close attention to information needs,4) retrieval, preparation and dissemination of information 5-retraction (Ahmadi, 2001: 218).

In general, some components regarding IT include the culture of data generation, data collection, summarization, analysis, processing, network thinking, integration, research, methodology, storage and information transfer.

Human resource management

Knowledge of human resource management in the past has been a lot of changes. If in the past didn't paid enough attention to it, but today granted certain importance to it and in future, human power managers have responsibility to make basic decisions of organization by expanding their influence. However, the more complex nature of work has increased the importance of human resource management functions. Information technology more than leading to simplify the jobs, leads to enrich the jobs and whatever organization's job are complex and rich, importance of human resource functions will increased. Human resource managers need to foster suitable cultural values in organization, and more than past and more than other managers should be more concerned about social responsibility and think about it. Managers should have emphasis on needs and people motivation to increase efficiency in organization (Zareie Matin 2012). Today organizations attempt for their survival and development. Without these qualities, it is impossible for organizations to act effective and competitive in faced with the best (Koklin 2008). In the advanced industrial world, among three wealth creative factor include: natural resource, physical resource and human resource, give them the most attention, productivity and profitability, owners of comments and Scientifics believed that human is development axis and attention to human with regard to dimensions of work life quality leads to increasing capacities and human abilities (Stone & Dulebohn, 2013). Qualified and skilled manpower is valuable and endless capital for growth and development of organizations and countries and the greatest capital of a country and its progress' factor (Mier et al. 2013). If in the past, labor, capital and land were the main factors of production into account, today, technological changes, manpower and efficiency increase are seen as agents of development (Jabor and Stones 2008). Each of management schools may regard different issues as efficiencies of human resources management. However, some of the most common and important ones include:

Supervising recruitment, job analysis, planning to provide necessary man power required for organizations, choosing and recruit the best and efficient manpower to fill the vacancies of organizations, designing and regulating which facilitate entrance of new employees into firms and help them find their most suitable status in the firms, training of staff and manager, designing efficiency evaluation system, reward, salaries and awards, complaints, security and health and disciplinary system (Sa'adat, 2011).

Transmission channels section

Introduction and application of IT in different areas of organization has its own special advantages, for example, it can play significant roles in the area of human resource and its relevant outcomes. Relation between components of information technology and components of goal in human resource management generally doesn't establish directly, in this field many of elements will be appeared as effect transmission channel or effective variants. Of course, when we use the information technology, we have expected that data collection occur on a regular basis, together, with compatible definition and disciplined. Likewise will be occur for other components of information technology. Entry and applying the information technology in organization and in various fields will have its special function and in the field of human resources and its function can play many roles to perform the human resources tasks better. Some of the information technology application' results in various functions of human resources management are: precision performance, speed performance, transparency in system, the integrity of the system design, extensive and timely information using the internet and internet networks, accurate and rapid assessment, on time feedback declaration, perform repeatable tasks by hardware systems, intangible controlling and evaluating, establish justice and more discipline (Poor Kiani and Farah Bakhsh, 2012).

METHODOLOGY

As it was told in the research literature, the present paper aims to examine the relationship between the impacts of the components of IT namely information transfer through transfer channel components on human resource management. In the present paper, considering the needs of the target organization, firstly, some variables of IT, transfer channel and human resource management are selected and the study conceptual model designed.

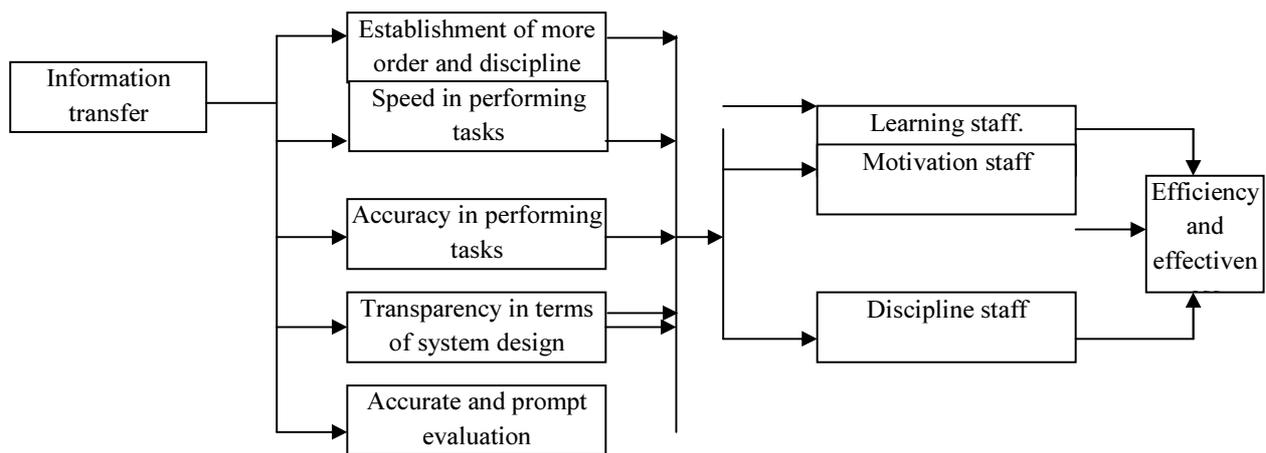


Fig. 1: the study conceptual model

Research Hypotheses

- The transfer of information through a communication channel affects the teaching staff.
- The transfer of information through a communication channel affects the motivation staff.
- The transfer of information through a communication channel affects the discipline staff.
- Information technology (transfer) through function elements of human resource management affects the efficiency and usefulness of organization.

RESEARCH METHOD

The current study is correlational research type using modeling method of structural equations 4. Target population of this study is all personnel of branches of Ansar Bank of Kermanshah province. By using the method distributed 160 questionnaires, after collection, 96 usable and safe questionnaires used for analysis. Data gathering method in this research is a combination of field and library method; from library studies in this research, information related to literature, subject and former investigations are collected by using of books, Persian and Latin articles, libraries of various universities, theses and also internet and refer to available digital libraries. And field method is used with standard questionnaire tools for data gathering of subjects. Data analysis is done by using of

SPSS and Amos statistical software in two deductive and descriptive levels. In descriptive level, statics like average and standard deviation, and in deductive level for determine the amount and power of components' effect of information technology on function elements of human resources management from structural equations modeling on the base of statistical software Amos are used.

Findings of research
hypotheses relation test

Table 1. correlations between the study variables

	R	P
The transfer of information through a communication channel affects the teaching staff.	0/505	0/000
The transfer of information through a communication channel affects the motivation staff.	0/435	0/000
The transfer of information through a communication channel affects the discipline staff.	0/415	0/000
Information technology (transfer) through function elements of human resource management affects the efficiency and usefulness of organization	0/502	0/000

Correlation analysis results shows, using of information technology has positive and meaningful relation through transmission channels on components of human resources management. Later research hypothesizes will be investigated.

hypothesis testing

The first hypothesis

transfer of information through communication channels affects the staff's education.

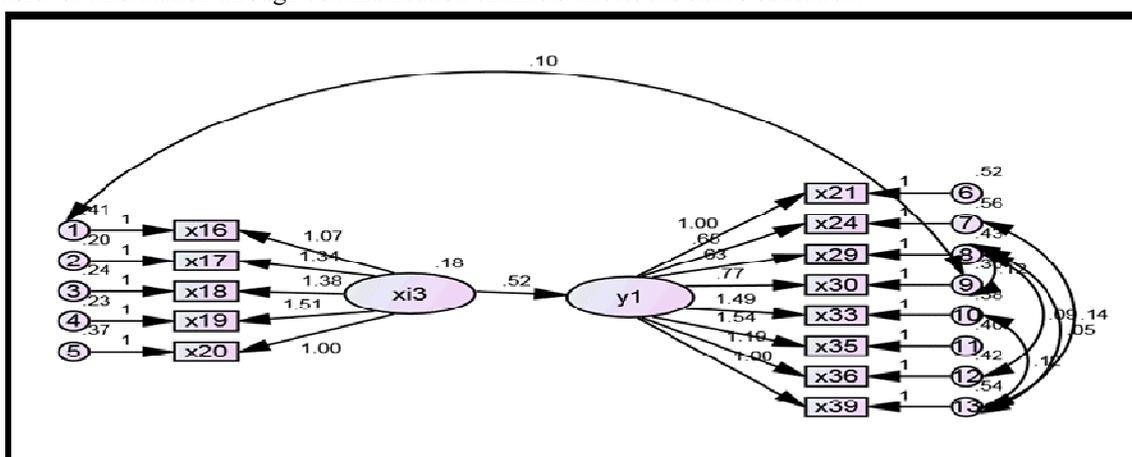


Figure 1. Model 1

For model (1) amount of chi – square statistic is 79/105, degree of freedom is 59 and meaningful level is 0/041. Because meaningful level is lower than 0/05, so we conclude that the fitted regression model between dependent and independent variables is meaningful and appropriate. Nevertheless, in model (1), xi3 is integration of information and Y1 is staff's education. All items of these two variable have factor loading higher than 0/50 and CR higher than 2 and meaningful level is lower than 0/50 which indicating that the model is appropriate for measuring the items. Therefore, external hidden effect coefficient (integration) on internal hidden (education) with meaningful level (0/012) is 0/52.

The second hypothesis:

Transfer of information through communication channels affects the staff's discipline.

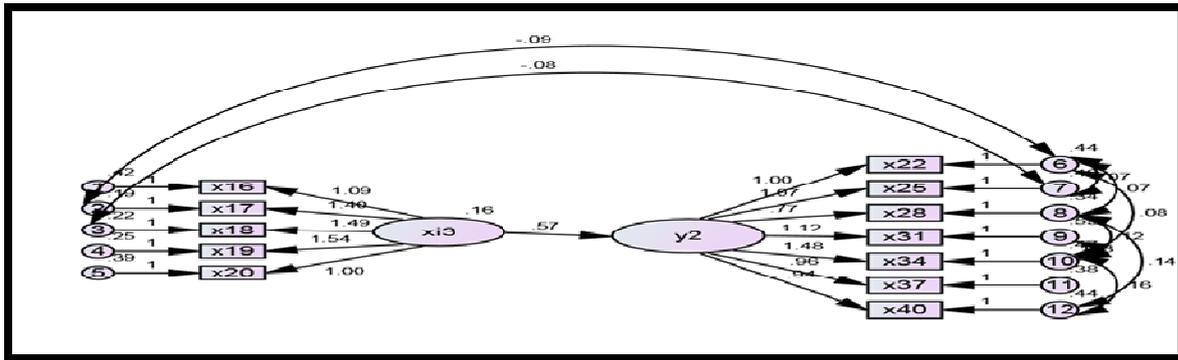


Figure 2. Model 2

2 For model (2) amount of chi – square statistic is 65.371, degree of freedom is 45 and meaningful level is 0/025. Because meaningful level is lower than 0.05, so we conclude that the fitted regression model between dependent and independent variables is meaningful and appropriate. Nevertheless, in model (2), xi3 is integration of information and Y2 is staff's education. All items of these two variable have factor loading higher than 0/05 and CR higher than 2 and meaningful level is lower than 0/50 which indicating that the model is appropriate for measuring the items. Therefore, external hidden effect coefficient (integration) on internal hidden (education) with meaningful level (o/oo6) is 0/57.

The third hypothesis

Transfer of information through communication channels affects the staff's motivation.

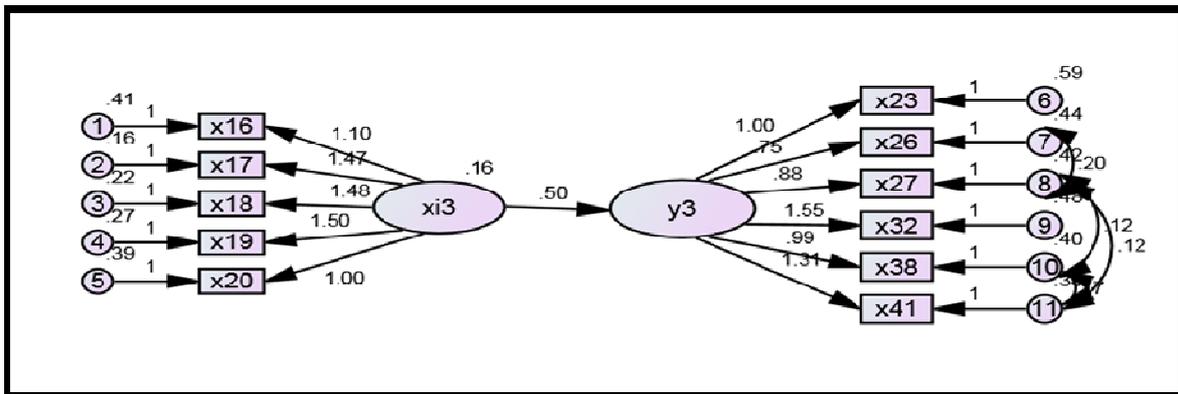


Figure 3. model 3

For model (3) amount of chi – square statistic is 58.984, degree of freedom is 40 and meaningful level is 0/027. Because meaningful level is lower than 0/05, so we conclude that the fitted regression model between dependent and independent variables is meaningful and appropriate. Nevertheless, in model (3), xi3 is integration of information and Y3 is staff's education. All items of these two variable have factor loading higher than 0/05 and CR higher than 2 and meaningful level is lower than 0/50 which indicating that the model is appropriate for measuring the items. Therefore, external hidden effect coefficient (integration) on internal hidden (education) with meaningful level (0/028) is 0/50.

The fourth hypothesis

transfer of information technology through function elements of human resources management affects the efficiency of organization.

Structural equation model (effect of human resources dimension on staff's efficiency)

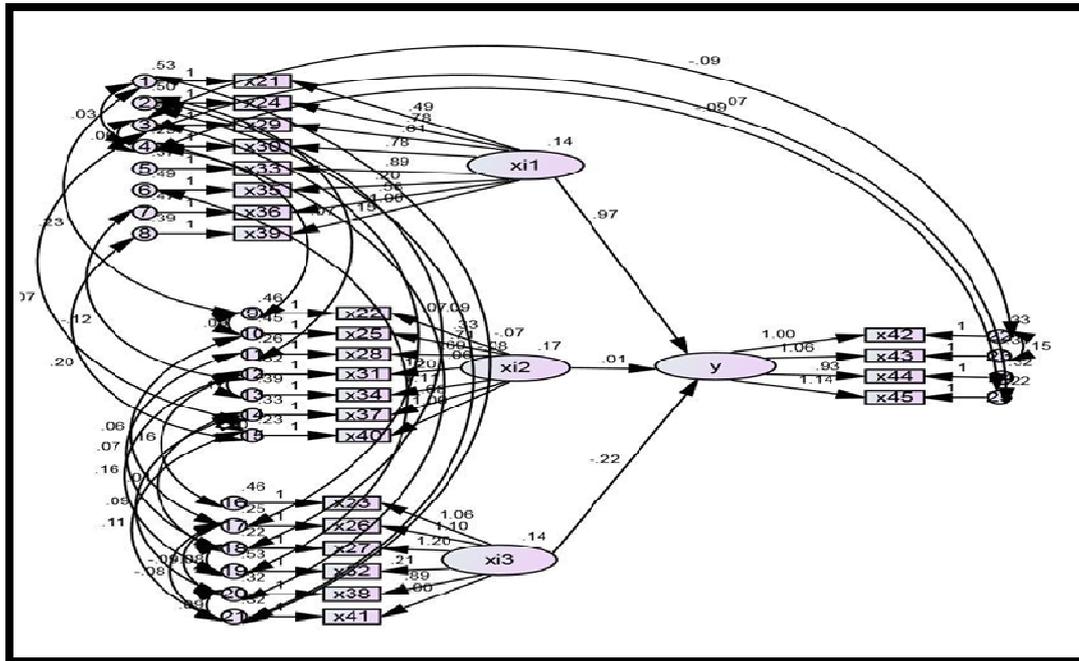


Figure 4. model 4

For this model statistic amount of chi-square is 481/457, degree of freedom is 241 and meaningful level is 0/000. Because meaningful level is lower than 0/05, we conclude that regression fitting model among dependent and independent variables is appropriate and meaningful. Nevertheless in model education xi1 through communication channels, xi2 discipline through communications channels, xi3 motivation through communication channels and Y is staff's efficiency. Except items (31-35) which doesn't get standard factor load, all other items of these two variables have factor load higher than 0/50 and CR is higher than 2 and meaningful level lower than 0/05 that indicates that model is appropriate measure for items. So external hidden effect coefficient (education) on internal hidden (efficiency) with meaningful level (0/000) is 0/97 and meaningful level of discipline effect is 0/924 and motivation is 0/095 which indicating these two variable haven't effect.

Fitting models

Table.2 :measures of hypothesis

	RMSEA	RMR	CFI	NFI
Model 1	0/060	0/038	0/931	0/786
Model 2	0/069	0/037	0/932	0/821
Model 3	0/071	0/044	0/934	0/829
Model 4	0/102	0/109	0/688	0/550

As it could be seen, in the models 1, 2 and 3, the value of CFI indicates the suitability of the model. However, NFI Index has not achieved the acceptable standard value for each three models, and the indices namely RMR and RMSEA show that their models are suitable. For the model 4, the values of NFI and CFI have not achieved the acceptable standard values, and also in the indices RMR and RMSEA it was indicated that the model had not acceptable indices.

DISCUSSION AND CONCLUSION

In this article effect of transfer variable is investigated through speedy performance, accurate in performance, rapid and on time analysis, establish more discipline and transparency in system on three variable of human resources management namely staff's education, staff's motivation and staff's discipline. Results show that transfer of information affects the human resources management and effect amount of each is clear. Also effect of human

resources management on efficiency of organization is measured. According to statistical calculations only staff's education leads to efficiency increasing in organizations. Today organizations are placed in dynamic, complex, ambiguity and loose aversion environment, and constantly affected by its environment and accept the change as inevitable necessity. Changes forecast with reasonable time will have problem. By understanding this fact that change is inevitable part and nature of third millennium organizations, consistency strength and compliance with recent developments in the field of economic, social and education increases. Having mighty and efficient manpower that are the foundation of national wealth and vital assets of organization will have many profits for organizations. With regard to obtained results can be concluded that by transfer information in organization structure can be seen education, motivation and staff's discipline were effective and because of this effectiveness efficiency of organization increases. According to obtained results, it is suggests to managers and responsible to make measures to perform staff's education on time and with more discipline and speed according to staff's needs and organization's goals. It is suggested to managers and responsible in line with motivational issues provide bed that staff's feeling independent in their work and must avoided from any work which limit staff's feeling of independent. Security and job stability is effective in motivation of staffs, so it is suggested in selection and employment process of staffs, to accelerate official decisive step and their preferment perform on clear and codified terms to reinforce this feeling in them. It is suggested to researchers that investigate the effect of other variables of information technology on variables of human resources management through these channels and its effect on efficiency of organization. Also investigate effect of each one of information technology variables on other variables of value chain of organization. Also, organizational culture can affects the studied variables. It is suggested to investigate relation of organizational culture with research' variables. At the end it is necessary to mention that this research hasn't claim that could enter all effective factors of function elements of human resources management in its suggestion model. Nevertheless it is attempt to provide a bed for enthusiasts to research in human resources management with general view to this issue from organizations of information technology integration only by primary steps.

REFERENCES

- Conklin, M. H. (2008) An examination of pharmacy faculty quality of work life: work satisfaction, turnover intentions, and self- efficacy, M.S. Dissertation, Duquesne University.
- FathiaN, M., Mollanapour, R., (2010), E-Business, 2ND edition
- Jaafari H, Abedi A, Rokni M, Yazdany HR.2011.Tatyr review operational performance and strategic performance using International *technology* to the Management of Human Resource in the company car maker and device maker Tehran Journal of IT Management, 3(9)-51-72.
- Jabour, C.J., Santos, F.C., 2008. The central role of human resource management in the search for sustainable organizations. The International Journal of Human Resource Management 19 (12), 2133–2154.
- Kirs, Peeter, Bagchi, Kallol , "*The impact of trust and changes in trust: A national comparison of individual adoptions of information and communication technologies and related phenomenon*", International Journal of Information Management 32 (2012) 431– 441.
- Maier a, Christian, Laumer ,Sven , Eckhardt, Andreas, Weitzel, Tim, "*Analyzing the impact of HRIS implementations on HR personnel's job satisfaction and turnover intention*", Journal of Strategic Information Systems xxx (2012).
- Poorkiani M, Farah bakhsh sh.2012. *The role of International technology in Human Resource Management*, Jounal of Strategy, 22: 240-246.
- Saadat, E., Human Resource Management, Samt, Thirteen
- Shahavarani Nasab, V., The impact of IT on Human Resource
- Schalk, René, Timmerman, Volken, Heuvel, Sjoerd van den, "*How strategic considerations influence decision making on e-HRM applications*", Human Resource Management Review 23 (2013) 84–92
- Stoel, M. D., & Muhanna, W. A. (2009). IT capabilities and firm performance: A contingency analysis of the role of industry and IT capability type. Information & Management, 46(3), 181–189.
- Stone, Dianna L, Dulebohn, James H. ", *Emerging issues in theory and research on electronic human resource management (eHRM)*", Human Resource Management Review 23 (2013) 1–5
- Zareie Matin A.2012.Advanced Human resource Management, Tehran: Publications.
- Zmud, R., Shaft, T., Zheng, W., Croes, H., 2010. Systematic differences in firm's information technology signaling: implications for research design. Journal of the Association for Information Systems 11 (3), 149–181.