

Modeling the impact of data integration on the functional elements of human resource management

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ABSTRACT: this study is done with aim to assess the impact of data integration on the functional elements of the human resource management. descriptive research method and correlational research design is 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 data collected were analyzed using statistical software SPSS and Amos. findings showed that IT (data integration) is effective through speed in performance, the accuracy of 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 resources, Ansar Bank, Kermanshah.

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 resources management. For example, technology helped to distinguish many of processes included design of human resources, 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 (Williams et al., 2009, Duleboh, et al., 2013). Role of information technology in modern organizations is strong to extent that recommends many of theorists of organization, managers and decision makers of organizations to adopt a strategy related to these technologies in future orientation of organizations (Poor Kiani & Farah Bakhsh, 2012). Managers of organizations are interested to measure value added of information technology in human resource area. So they need to know about information technology effect on human resource performance. Therefore, this study is seek to investigate information technology effect on human resource management through components of transfer canal of IT and so effect on efficiency in Ansar Bank of Kermanshah province.

Information technology

Study of information concept is referring to investigate technology and information concepts. Information technology in general meaning is as collection of tools and systems to collect, organize, save and publication the information include voice, image, text or digit (Poor Kiani & Farah Bakhsh, 2012). Some of owner comments recognize the information technology as collect, organize, save and publication of information include voice, image, text or digit which occurs by using computer and telecommunication tools (Razavi, 2008). Information technology includes a set of techniques and tools in order to optimization and supports the active systems knowledge and information – based , also include study, design, spread, maintenance and information systems management based on computer specially computer software and hardware applications (Ray et al., 2005 , Stoel & Muhanna, 2009). By expanding new tools' application of information and communication, in recent decades world was area 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 (Masil et al. 2008; Zmud,

et al. 2010). 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 resources 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 data 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 (Pavlou & Sawy 2006; Aral & Weill 2007; Peeter and Kallol, 2012).

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; Bartel 2004). Human resource management is one of the main responsibilities in any organization and all managers of numerous levels of organization have some sort of this responsibility, so, human resource management is operation from human capital of company to achieve organizational goals (Seyed Javadiyan, 2001). 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 (Shuler and Jakson 2001; Youndt and Snell 2004; Koklin 2008; Schalk el Al.,2013). 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 (BakhtiariNasr Abadi et al, 2008; Farahi Bozjani, et al 2008, 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 (Taylor & Finley 2009; Maier ,et al. 2012). 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 (Soltanzadeh, et al. 2012, Mayer ,2008, Jabour, C.J., Santos, 2008).

Transmission channels section

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).

Research Hypotheses

The integration of information through a communication channel affects the teaching staff.
The integration of information through a communication channel affects the motivation of staff.
The integration of information through a communication channel affects the discipline of staff.
4-information technology (integration) through function elements of human resources 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 162 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, thesis's 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 SPSS16 and Amos 16 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

Table 1 . Correlations between the study variables

	R	P
The integration of information through communication channels there are on the teaching staff.	0/574	0/000
The integration of information through communication channels are related to the discipline of employees.	0/522	0/000
The integration of information through communication channels on employee motivation are related.	0/389	0/000
Between IT human resource management through the functional elements on the efficiency and effectiveness of the organization are related.	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.

The first hypothesis

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

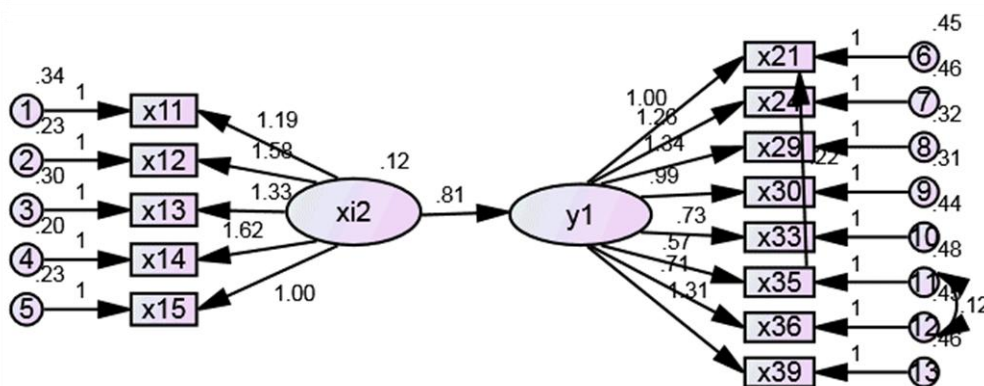


Figure 1. Model 1

For model (1) amount of chi – square statistic is 892/83, degree of freedom is 63 and meaningful level is 040/0. Because meaningful level is lower than 05/0, so we conclude that the fitted regression model between dependent and independent variables is meaningful and appropriate. Nevertheless, in model (1), xi2 is integration of information and Y1 is staff's education. All items of these two variable have factor loading higher than 50/0 and CR higher than 2 and meaningful level is lower than 05/0 which indicating that the model is appropriate for measuring the items. Therefore, external hidden effect coefficient (integration) on internal hidden (education) with meaningful level (002/0) is 81/0.

Model fitting

Table 2. Measures of model 1

RMSEA	CFI	RMR	NFI
0/059	0/922	0/035	0/757

As seen, CFI amount is indicating the model acceptable, but NFI index doesn't get appropriate amount of standard, it is cleared in RMSFA and RMR that model is desirable.

The second hypothesis

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

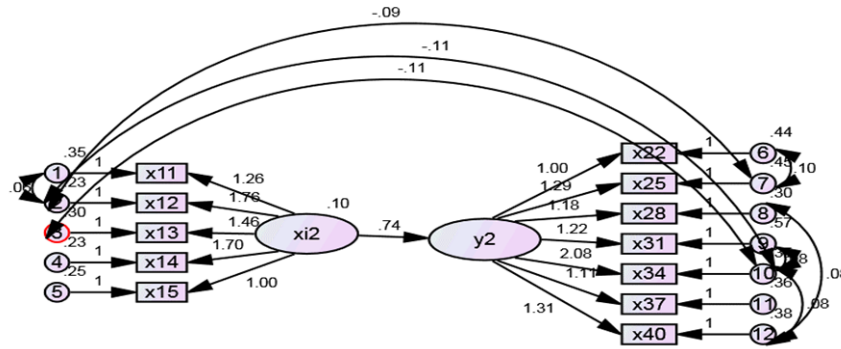


Figure 2. Model 2

For model (1) statistic amount of chi-square is 63/681, degree of freedom is 46 and meaningful level is 0/043. 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 (2) xi2 is integration of information and Y2 is staff's discipline. All 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 (integration) on internal hidden (discipline) with meaningful level (0/005) is 0/74.

Fitting model

RMSEA	CFI	RMR	NFI
0/064	0/938	0/033	0/816

As seen amount of CFI indicating acceptability of model, but NFI index doesn't get acceptable standard amount. In RMSEA and RMR it is cleared that model is appropriate.

The third hypothesis

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

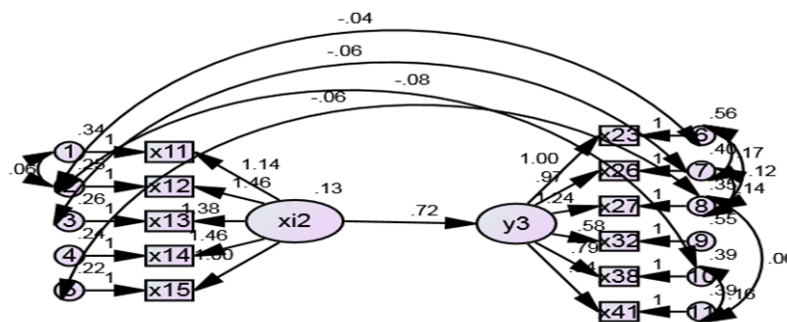


Figure 3. Model 3

For model (3) statistic amount of chi-square is 49/070, degree of freedom is 34 and meaningful level is 0/046. 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 (3) xi2 is integration of information and Y3 is staff's motivation. Except item (32) all 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 (integration) on internal hidden (discipline) with meaningful level (0/007) is 0/72.

Fitting model

Table 4. Measures of model 3

RMSEA	CFI	RMR	NFI
0/068	0/944	0/034	0/849

As seen amount of CFI indicating acceptability of model, but NFI index doesn't get acceptable standard amount. In RMSEA and RMR it is cleared that model is appropriate.

The fourth hypothesis

Integration 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)

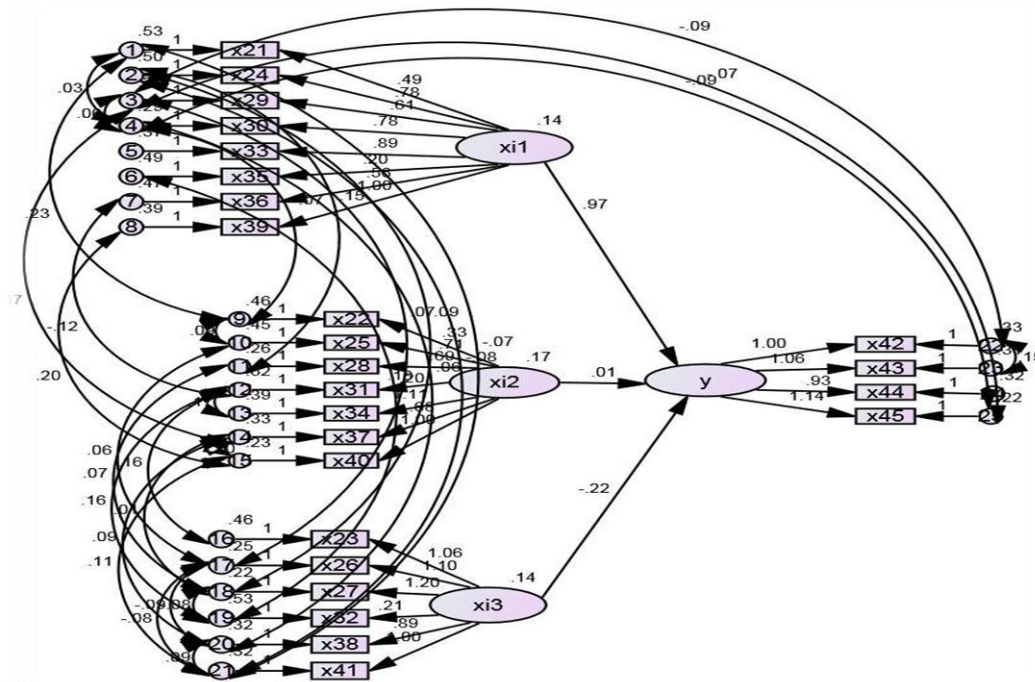


Figure 4. Model 4

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 model

Table 5: Measures of efficiency and effectiveness model

RMSEA	CFI	RMR	NFI
0/102	0/688	0/109	0/550

As seen CFI and NFI amounts doesn't get acceptable standard suitable amount and RMSFA and RMR it is cleared that model don't approved from indexes aspect.

DISCUSSION AND CONCLUSION

In this article effect of integration 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 integration 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 integration 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.

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