The Effect of Organizational Intelligence on Talent Management, Using Structural Equations

Karamoallah Daneshfar¹, Zahra Rajaie², Zahra Masoumi Bilondi³, Sayyid Ali Banihashemi⁴

¹Department of Management, Islamic Azad University, Science and Research Branch, Iran
²Department of Management, Payame Noor University, Iran
³Department of Accounting, Payame Noor University, Iran
⁴Department of Industrial Engineering, Payame Noor University, Iran, banihashemi@pnu.ac.ir

Abstract

Many of scientists believe a capability for organizations called "Organizational Intelligence" that is a combination of humane intelligence and machine intelligence. Talent management is the foundation of organizational success and it makes possible for organizational systems to achieve higher objectives. Managers using Talent Management prefer effectiveness over efficiency and try to guarantee the productivity of organization's human resources. In this study, the impact of organizational intelligence on Talent Management in Birjand Roads & Urban Planning Department has been investigated. The statistical population was included all employees of Birjand Roads & Urban Planning Department. The questionnaires were distributed among them in April and May 2014. The statistical sample was 72 persons; therefore, in order to collect information, we used Albrecht's Organizational Intelligence Questionnaire and Phillips and Roper Talent Management Questionnaire. The results have shown that Organizational Intelligence has positive impact on Talent Management. Also all the indicators of measurement model and all the research questions have been confirmed.

Keywords: Talent Attraction, Talent Development, Talent Retention, Talent Management and Organizational Intelligence.
**Introduction**
A prerequisite for a developed society is having developed organizations and developed organizations achieve their powers from specialized human resources who are the strategic capitals. Men having the greatest source of strength, namely thinking, can cause the development and growth of the organizations.

To gain competitive advantage encountering this complex environment, the organizations need elites. Therefore, in recent years, talent management and organizational intelligence has discussed more than ever as a key management activity. In late 2004, a search done on the term "talent management" by an Internet search was included 2700000 titles. (Lewis et al 2006, 139:154)

Various writers have considered different definitions and assumptions about it. One of the definitions talent management includes all organizational activities aimed at attracting, developing and retaining the best employees and putting them in their most effective roles. (Collings et al 2009, 310).

Talent management integrates resources, processes and the values designed for attraction and sharing key talents in order to drive an organization's business objectives. Finally, effective recommendations on conducting the discussion will improve the employees’ performance and increase their productivity in this center.

In terms of organizational intelligence Howard Gardner, the researcher and psychologist at Harvard University claims that, as human beings have multiple intelligences, organizations also have different intelligences. Organizational Intelligence leads the attention of organizations to the effectiveness and helps them to apply their potential powers and manage the talents. (Stallings 2004, 56)

Symych defines organizational intelligence as follows: Intellectual ability of the organization to solve organizational problems; here, it emphasizes on the coherence of technical skills and human abilities for solving problems. Organizational Intelligence includes General information, experience, knowledge and understanding of organizational issues (Simic2005, 189: 196). So that companies that have higher organizational intelligence, do more investments on human resources and have higher levels of productivity (Riera, et al, 2007).

Accordingly organizational intelligence can be placed among the factors affecting talent management. This study seeks to conduct an empirical analysis based on the data, to examine the relationship between talent management and organizational intelligence. The framework of this study is limited to two concepts talent management and organizational intelligence and the research has been done on the employees of Birjand Roads and Urban Planning Department.
Review of Literature
Talent Management
Today business faces with increasing global competition, changing in market conditions, and unpredictable events. Therefore, attraction, development and retention of the skilled employees are probably more difficult than before and it is not surprising. (Haji Karimi, 2011, 57).
The challenge for the future business world, is gaining the organization’s vital knowledge with valuable human resources producing such knowledge. In fact, talent management is "a secret weapon in World War to acquire talent" (Michaels et al 2001). At the same time with understanding the need for recruitment, development and retention of talent, the organizations have realized that the talents are critical resources that some kinds of management is required to achieve the best results (Sweem2009). In the era of globalization and technological progress, human capital is considered as the most important investment of organizations. This valuable source has caused changes in business priorities and strategic perspectives and undermines the validity of the traditional model. Investigating talent management as a new approach can create a change in human capital, and overcome weakness against traditional approaches. In addition, its association with emotional intelligence variable which relates to the relationship between employees and managers and evaluates the people’s ability to understand and control their emotions and also the others, provides a condition in which they apply all their abilities, talents and skills with full awareness, enthusiasm and tranquility to carry out their assigned tasks and hereby they maximize the efficiency of their organization (Shaemy et al 2013, 48).
Talent management is not a task that can be done only by attracting talented people but also attraction of the talented individuals is the first task of the organization in the process of talent management. High salary and fringe benefits also cannot work alone. In this case, it is expected that all the employees focus their efforts on engaging organizational activities. (Khalvndy and Abbaspour, 2013, 104) Based on the man power research, conducted on nearly 33,000 employees from 23 countries in October 2006, the organizations have trouble to fill key positions with talented individuals (Hand Field, 1977, 22). Talent Management is one of the most important issues that organizations consider it, however doing it only based on what is stipulated in the law cannot guarantee its success in the organization (Haji karimi, and Hosseini, 2011,96). Talent management has proposed sometimes as a management function or as one of the tasks of human resource management and in some cases as the task of the organization leadership and sometimes as a joint effort done by the organization management and human resource management and each one is influenced by a particular approach. Experimental activities in the field of talent management suggest that while implementation of this process, organizations sometimes pays attention to one or two dimensions more than the others. There are also organizations that have achieved an integrated system of talent management. Unfortunately, in spite of increasing costs in the process of recruiting talented people as well as the high cost of training these people in order to flourish their talents, in many cases, we saw that in practice, these people tend to leave the organization and change their job. The reasons of increasing this desire are the recent organizational downsizing, many job opportunities that have been created by new technologies, convenient access to the multitude of jobs via Internet, lack of job satisfaction, lack of necessary organizational commitment, lack of meritocracy in the organization and changing job requirements (Rothwell, 2001, 35). Therefore, benefiting from the talented human capital is considered a necessary condition for the success of an organization:

Collins and Mellahi model: Theoretical models with talent strategic management approach which is based on the following processes:
1. Identification of key and strategic jobs
2. Creating a talent repository (Collings and Mellahi, 2009, 303-313)
3. Architectural design of Human Resources, particular for talents
4. Outputs

DDIS model: It is based on the organization's vision, determined goals and the demand for talent (Welling & et al, 2006).

Lewis and Hackman model (2006): This model begins with strategy and competitive advantage and determines the concepts of talent based on them.

Phillips and Roper (2009): This model has been designed for Real Estate Industry, which includes five factors: attracting, selecting, engaging, developing and retention of the employees. Sweem (2009) also believes that talent management strategy encompasses five components.
1. Performance Management
2. Employees’ Education
3. Reward and Appreciation
4. Communication

Organizational Intelligence
Organizational intelligence is a new concept in the organizational management literature in 21st century. Halal believes that the Organizational Intelligence has been resulted from the following cognitive subsystems: organizational structures, culture, beneficiaries’ relations, knowledge management and strategic processes (Halal 2007). Mc Master in 1996 defines organizational intelligence as follows: organizational intelligence is an organization's ability in collecting information, having innovation, knowledge creation and acting based on such knowledge. Glynn believes that Organizational Intelligence is the result of the community and interaction of every member’s intelligence. Organizational Intelligence is a social process theory of which has been planned based on human intelligence. (Glynn 1996) Also Organizational Intelligence is defined as the capacity of an organization to mobilize all the available intelligence abilities and centralize such abilities to achieve the mission of the organization (Lefter 2008).

Organizational Intelligence is the capacity and capability of an organization to create knowledge and use it for strategic adaptation to the environment. Organizational intelligence is similar to Intelligence quotient IQ of human. (Karl 2006) Also, in Albrecht’s theory (2003), organizational intelligence has seven components, including: Strategic landscape, tendency to change, the policy, common destiny, unity and consensus, application of knowledge and pressure of performance.

Karl Albrecht considers seven factors for organizational intelligence including:

- Strategic landscape: Ability to create, induction and expressing the objectives of an organization.
- Common destiny: having common & unit objectives and a sense of spirit corps
- Tendency to change: the ability to deal with unexpected challenges and adapt to a variety of changes.
- Commitment and optimism: increased morale and energy to gain success
- Alignment and consistency: Usefulness of tools and rules existed in the organization in line with the success and interaction of the members with each other in order to deal with the environment.
- Development of knowledge: the capacity to share information, knowledge and insight with others and the free flow of knowledge throughout the organization.
- Pressure of performance: being serious in doing appropriate works for having ingenious efficiency and common success

Talent Management and Organizational Intelligence
In the current era human is considered as endless capital, because decrease in human flourishing capital will lead to a decrease in productivity (Ansari, Rahmani Ushanloui, Oskoui, and Hosseini,
2011). According to Bhattacharya and et al (2005), Human Resources benefiting from some features such as creating value, rarity and difficulty of imitation, improve the organization's potentials. The knowledge economy needs employees who constantly learn and adapt themselves to the changing technologies (Fraser & et al 2010,79: 94). Simic (2005) says organizational intelligence indicates mental capabilities of an organization that gathers the Technical and human potentials applied in solving organizational problems. In Chamberz’s research titled "Talent War", there is a direct relationship between the quality of succession management plans and shareholders income.

Research Hypotheses
1. There is a meaningful relationship between organizational intelligence and talent attraction at Birjand Road and Transportation General Department.
2. There is a meaningful relationship between organizational intelligence and talent development at Birjand Road and Transportation General Department.
3. There is a meaningful relationship between organizational intelligence and talent retention at Birjand Road and Transportation General Department.

Research Method
The present study is applied type research and a descriptive - survey method was used. In this research we study the talent management factors using structural equations in Birjand Roads & Urban Planning Department. The statistical population included all employees of Birjand Road & Transportation Department and the questionnaires were distributed between all of them, the rate of return of the questionnaires was 0.76 and in terms of time, it was done in April and May 2014.

Method of Measuring Research Variables
Research variables including organizational intelligence, talent management and descriptive variables were collected through questionnaires. The questionnaire consists of 4 sections: In the first part, the respondents are given the required information about the purpose of this project to trust and give honest information. The second part contains general information such as age, sex and education. In the third section 49 questions were considered to measure the dimensions of the independent variable i.e. organizational intelligence. For any question that has been measured by Likert scale, five options have been considered. The questions consist of seven component of intelligence including strategic landscape, common destiny, tendency to change, spirit, unity and consensus, application of knowledge and pressure of performance. The fourth part of the questionnaire includes 23 questions and measures the dependent variable i.e. talent management. To study the organizational intelligence, we used the organizational intelligence questionnaire of Albrecht and for talent management, talent management questionnaire was used. Since the questionnaires were standard, they represent the characteristics that the researchers plan to measure them. Data collected from the above-mentioned questionnaires was fitted through Spss and PLS software and research hypotheses were analyzed. Albrecht organizational intelligence questionnaire: Organizational Intelligence was designed by Albrecht for the first time in 2003.
Table 1: The distribution of questions with model parameters in organizational intelligence questionnaire

<table>
<thead>
<tr>
<th>Indexes</th>
<th>Question number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Landscape</td>
<td>48-42-22-17-15-3-2</td>
</tr>
<tr>
<td>Common Destiny</td>
<td>47-44-36-33-19-9-4</td>
</tr>
<tr>
<td>Tendency to Change</td>
<td>45-43-34-28-24-14-13</td>
</tr>
<tr>
<td>Courage</td>
<td>40-37-25-10-6-5-1</td>
</tr>
<tr>
<td>Unity and Consensus</td>
<td>41-39-38-26-20-18</td>
</tr>
<tr>
<td>Application of Knowledge</td>
<td>35-31-30-29-23-21-7</td>
</tr>
<tr>
<td>Pressure of Performance</td>
<td>49-46-32-27-16-11-8</td>
</tr>
</tbody>
</table>

Talent Management Questionnaire has been designed for measuring talent management with the help of Philips and Roper model questionnaire and the questionnaire factors have been derived from the research literature. The most appropriate way to assess the validity is using factor analysis. By using Factor analysis we can identify whether the questions of the questionnaire measure the desired indexes or not. Factor loading is a value between zero and one. (Appendix1) if the factor loading is less than 0.3, poor relationship is considered and it is ignored.

Tables 2: Factors of Talent Management

<table>
<thead>
<tr>
<th>Factors used in the study, according to the research review of literature</th>
<th>Talent management components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand reliability, appropriateness of the offering rewards, providing opportunities for employees, supporting eager people, searching for top graduates and innovators, specialized interview for employment, reviewing local records &amp; research, the matching job with employees, clear definition of competence, clarity of assessment criteria, forecasting potential talents, measuring and evaluating the employees’ performance, making the employees socialized</td>
<td>Attraction question 1 to 14</td>
</tr>
<tr>
<td>Assessment of the strengths and weaknesses of the organization, job rotation within the organization, consultation in holding training courses inside the organization or out if needed, instructing, observing the relationship between the teacher and the students, Equal Employment Opportunities for individuals, succession planning in the organization, in time and adequate salary for the staffs and...</td>
<td>Development Questions 15 to 22</td>
</tr>
<tr>
<td>Timely and adequate bonus for the employees, the Equal Employment Opportunities, employee participation in performing affairs, correcting inappropriate behaviors, taking appropriate measures in relation to wrong</td>
<td>Retention questions 23 to 28</td>
</tr>
</tbody>
</table>
persons, sharing professional experiences of the staff.

Figure 2. Statistical criteria T

According to Table 2, factor loading is acceptable between 0.3 to 0.6 and if it is greater than 0.6, it is very desirable. The majority of the factors loading is greater than 6.0 and very desirable. Questions that their factor loading were less than 0.6 were eliminated. To evaluate the reliability (internal consistency) of this research questionnaire, Cornbrach’s alpha coefficient was used.

Table 3: Measurement Model

<table>
<thead>
<tr>
<th>Composite Reliability</th>
<th>Coefficient of Determination (R)</th>
<th>Cornbrach’s alpha</th>
<th>Average Variance Extracted (AVE)</th>
<th>variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.95</td>
<td>0.95</td>
<td>0.89</td>
<td>0.55</td>
<td>Organizational Intelligence</td>
</tr>
<tr>
<td>0.90</td>
<td></td>
<td>0.88</td>
<td>0.62</td>
<td>Talent Retention (maintenance)</td>
</tr>
<tr>
<td>0.91</td>
<td></td>
<td>0.91</td>
<td>0.55</td>
<td>Talent Attraction (absorbtion)</td>
</tr>
<tr>
<td>0.89</td>
<td></td>
<td>0.85</td>
<td>0.50</td>
<td>Talent Development</td>
</tr>
</tbody>
</table>
The amount of alpha and composite reliability must be more than 0.7 and convergent validity must be greater than 0.5. So based on the results of the above stable above all the indicators of the measurement model were approved.

Research Findings
According to Table 4 and Figure 2 statistic value of T for all the variables studied was greater than 1.96 so it can be concluded that all three hypotheses have been confirmed.

Table 4: Results of hypothesis testing

<table>
<thead>
<tr>
<th>result</th>
<th>P</th>
<th>T</th>
<th>hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmed</td>
<td>0.05</td>
<td>55.714</td>
<td>There is a meaningful relationship between organizational intelligence and talent attraction at Birjand Roads &amp; Urban Planning Department.</td>
</tr>
<tr>
<td>Confirmed</td>
<td>0.05</td>
<td>14.882</td>
<td>There is a meaningful relationship between organizational intelligence and talent retention at Birjand Roads &amp; Urban Planning Department.</td>
</tr>
<tr>
<td>Confirmed</td>
<td>0.05</td>
<td>17.143</td>
<td>There is a meaningful relationship between organizational intelligence and talent development at Birjand Roads &amp; Urban Planning Department.</td>
</tr>
</tbody>
</table>

Since according to the diagram T statistic value examined for all the variables, is greater than 1.96 we can be concluded that each of the components of organizational intelligence has a significant positive relationship with talent management and all the research questions have been approved.

As Figure 1 shows the path traced from organizational intelligence variable to talent management is meaningful. So paying attention to the dimensions of organizational intelligence, provides an environment full of assures, trust, empathy and friendship among the staff. In such an environment the staff respects each other, leading to the maximization of talent in an organization. Hence, we must measure the factors of organizational intelligence, then periodically review and re-evaluate them. It will enhance the organizational intelligence subsystems which shall be required for changing into a an intelligent organization having talent reservoir.

Results and Research Applications
Talent management process is a critical need for organizations. Today, most organizations agree that the human capital has competitive advantage. Studies show that attracting talented individuals does not guarantee benefiting from the competitive advantage for the organization. This study sought to finally render appropriate solutions for talent management process in this department, and collection of human resource strategies in line with the business strategy and organizational culture requires attracting, development and retention of talent in the organization and then it enables the organizations to design a comprehensive pattern for managing talents by
using different strategy of human resources, such as paternal, contractual, commitment or secondary strategies appropriate to the type of Human Resources and by using the matrix of strategic reference points. Results of this study can inform the individuals responsible for recruitment, promotion, training, development and assessment of talented employees in Birjand Roads and Urban Planning Department to make proper decisions as for succession and replacement plans. Also it informs the high-level decision makers that in which place and which way focus their attention till they can have the maximum impact on employees’ job obligations. As Meyers and et al (2013) suggest, in talent management area, the challenge that whether this talent is innate or it is acquired or it is a combination of them, has proposed different ideas in the field. Strong approach to talent management is not elites oriented but also it emphasizes on maximizing the contribution of talent and facilitates a higher level of engagement and participation of all employees in the organization. It emphasizes on the importance of converting talents to stable function. (Collingsa, Mellahi, 2013) Talent management such as strategic human resource management in the same viewpoint about the human capitals, emphasizes on maximizing sustainable competitive and strategic advantage with emphasis on practices related to attracting the best, developing existing talents and retaining talents for long time. (Collings, Mellahi, 2013).

According to the results, 95 percent of changes in talent management are explained by the Organizational Intelligence that consists of seven components including strategic landscape, common destiny, tendency to change, spirit, unity and consensus, application of knowledge and pressure of performance. In other words, the results demonstrate that the organizational intelligence has strong synergy with strengthening talent management. Therefore it is recommended that the Roads and Urban Planning Department strengthens the organizational intelligence factors in order for talent management and thus paves the way for talent management and uses the talents for obtaining the desired outcomes from the different positions and takes advantage of new opportunities.

Regarding the results, the following strategies were proposed as the most important strategies to increase organizational intelligence in Roads and Urban Planning Department:

In addition to the development of organizational smart devices and considering technology, we must try to create interaction between human resources as organizational intelligence potentials, strengthen methods and dimensions of the organizational intelligence and create strategic solutions to improve the spirit of cooperation and common goal in all members of the organization.

Codification of the structures, regulations and appropriate methods and procedures consistent with the goal of increasing the variables under study

Financial support of programs that promote knowledge management and organizational intelligence in organization

Senior managers should also review the organizational intelligence literature and use internal talent and create unique models for the variables of organizational intelligence with regard to the specific requirements of the organization as well. Obviously, the creation of each model must be dynamic and also updated upon changing the demands of the work environment.
Holding in-service training programs for managers and specialists and creating awareness in the people about the components of organizational intelligence for application of talent development in the organization.

Formulating organizational strategies, determining long-term and short-term goals based on strategies, identifying key agents of success in achieving goals, determining assessment indicators, formulating executive plans for achieving goals and introducing the strategies, goals, success factors and assessment indicators to the staff and making the necessary executive decisions, reviewing and updating them can be effective in improving organizational intelligence and talent management.

Providing necessary background for creating an atmosphere to accept changes, new ideas and staff innovations

Creating appropriate information system for collecting, processing and reporting information related to the implementation of knowledge management, especially through increasing the organizational memory

As organizations resist against new conditions, the obstacles that cause resistance should be removed; therefore, the use of talent development techniques will be important.

Paying attention to creating changes in employees working conditions in the organization and creating the conditions for the acquisition of practical experience for managers

This fact will lead to a change in the attitude of the staff and as a result changes the individual, group and organizational behavior.
References