



INVESTIGATING THE EFFECT OF BUSINESS INTELLIGENCE ON THE
PERFORMANCE OF THE ORGANIZATION'S EMPLOYEES WITH THE
MEDIATING ROLE OF THEIR INDIVIDUAL CHARACTERISTICS
(CASE STUDY: POST BANK OF IRAN)

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Abstract

Business intelligence systems provide tools that respond to the organization's information needs appropriately. Organizational intelligence can be considered as a set of mathematical models and analytical methods for extraction of information and knowledge from existing data that is used for complex decision making. The current research is also a descriptive survey of nature and method. The effect of business intelligence on the job performance of post office bank employees has been studied. The statistical population of the survey is employees of post office of supervisory authority of northern Tehran, whose number is 1422 people. The sample size was calculated using Morgan table of 303 people. Sampling method according to There are a number of branches available for sampling. The reliability of the questionnaire was obtained for independent and dependent variables at a very satisfactory level. For data analysis, Kalmogorov-Smirnov and regression tests were used. Results showed that all components of business intelligence had an impact on employee performance. Finally, functional suggestions were presented.

Key words: Organizational intelligence, Job performance, Employees, Organizational intelligence

I. STATEMENT OF THE PROBLEM

The mastery of new technologies, such as organizational intelligence in businesses, is an unavoidable requirement. Organizational intelligence means having a comprehensive knowledge of all factors affecting the organization. Business intelligence helps you to identify



your organization's weaknesses and strengthen its strengths. In your organization, all managers and decision makers will have immediate access to all information and can use them. The management information systems only developed theoretically, and they never really responded to the needs of organizations. On the other hand, the development of new information technologies has transformed the services and performance of organizations, and each day has increased the depth and breadth of these developments (Barati, 1380).

Business intelligence systems provide tools that respond to the organization's information needs appropriately. Organizational intelligence can be considered as a set of mathematical models and analytical methods for extracting information and knowledge from existing data that is used for complex decision making. In large organizations, decisions are made on an alternate basis. Some decisions may be more or less critical, or have a long-term or short-term effect, and include different individuals and roles and hierarchies. The ability to decide the knowledge workers of an organization individually and collectively is one of the important and influential factors on the productivity and competitive advantage of an organization.. (Single truth, 2010)

Today, the business environment faces new challenges. Challenges such as globalization of markets, more informed customers, increased bargaining power of suppliers, strategic competitors and evolving technologies. Despite such challenges in the competitive world, any business for success requires the vigilance to get what's happening. This allows them to make appropriate decisions before they are too late and to react appropriately. Business intelligence is not presented as a tool or product or even a system, but as a new approach to organizational architecture based on the speed of information analysis in order to make accurate and intelligent business decisions in the least possible time. (Zarrin, 1388)

Post Bank of Iran is an Iranian state bank that is active in providing financial services and banking services to rural areas. With its ten thousand rural communication services, the bank is considered to be the largest bank in the country in terms of access to remote locations in Iran. The Bank of Iran's bank has officially begun its activity in December of 1375 and is currently continuing its work. The nature of the post bank activities is mostly microfinance, on the basis of integrated electronic banking and banking services (Jalali, 2010)

In the present era, recognizing the personality traits of people in many situations of life is necessary. Studies show that one of the causes and causes of conflict in organizations is the existence of individual and personality differences of individuals. In other words, conflicts arise because individuals do not always agree on goals, topics, beliefs, and the like, and because individuals in organizations with different personality traits, such as the control center (introverted, extraterrestrial) , Power-seeking, self-esteem, position-matching, risk-taking, etc., are busy causing more conflict among people. Therefore, in this research, among the various personality traits that affect organizational behavior, a number of personality traits proposed by Robbins, including the control center, power seeking, self-esteem and situational adjustment,



will be considered and acts as a mediator in the relationship between business intelligence and the organization's performance.

II. IMPORTANCE AND NECESSITY OF RESEARCH

The necessity of evaluating business intelligence is currently responding to the current situation and the need of managers. The organization, through the use of business intelligence, increases the effectiveness of using existing information structures in line with its objectives, and extends information from operational and restricted to use in executive bodies of the organization for use by managers. Given that managers work in organizations that are affected by their internal and external environment, they need learning power in responding to their problems, such as humans. Therefore, the issue of business intelligence can help the managers in this matter and enable them to meet their needs in terms of their organizational memory and timely response to environmental changes. Therefore, managers need business intelligence to advance their organizational goals and achieve them, which can improve their performance by relying on it. Considering the above, it can be said that the feeling of the need for business intelligence in the organization is felt for the first time at high managerial levels and transferred from the top of the organizational structure pyramid to the lower parts and other knowledge workers, but to create it It should start from the lowest levels and layers. The most important need for a manager and staff is to have accurate information to make the right decision for the proper performance of the staff (Zarrin, 2009).

III. RESEARCH BACKGROUND

Lefter et al., 2008, conducted a study on human capital in a research entitled Dimensions of Organizational Intelligence in Romanian companies. The main purpose of this research is to provide a general overview of the position of Romanian company employees according to the seven dimensions of organizational intelligence in Albrecht. Also, this study seeks to investigate the differences between large organizations with more than 150 employees and small organizations. With the assumption that human resources and differences in organizational culture and leadership between the two classes can have a significant effect on the perception of the dimensions of organizational intelligence and their performance.

Al-Bashir et al. (2008) also focused on the impact of organizational intelligence systems on business processes and provided an impact measurement method. Lin et al. (2009) developed a performance evaluation model for a single system of organizational intelligence using a network analysis process.

Chekire and Ada (2008) in another study titled "Can the organization develop the school's in-service intelligence through service training, in Turkey?" They concluded that these variables had a meaningful relationship with each other.



Leibowitz (2007) published a book titled "Creating Organizational Intelligence in Organizations: First, Knowledge Management" explains organizational intelligence. He considers organizational intelligence to be the functions of knowledge management. It defines organizational intelligence as: A set of all intelligences that are used to create a common perspective, the process of refurbishing, and the overall system guidance.

Schwaininger (2010) published a book entitled Research Systems and Behavioral Sciences, an interdisciplinary framework, and presented various models in a coherent framework explaining organizational intelligence.

Bushan Kapoor (2012), a professor at the University of California, USA, explores the implications of organizational intelligence for managers and staff in organizations as a source of human resources in an enterprise-rich environment, and the impact these employees have on customer satisfaction. .

Dr. Gholamali Tabarsa (2012) Associate Professor of Shahid Beheshti University In an article explaining the relationship between organizational intelligence and the creation of knowledge: In this research, we first introduce the organizational intelligence and its general concepts and concepts. The purpose of this study is to investigate the relationship between organizational intelligence and knowledge creation. . Findings from the hypothesis test indicated a positive and significant relationship between organizational intelligence and its components by creating knowledge.

IV. RESEARCH METHODOLOGY

The research methodology is a combination of the concept of method and research, which is a set of valid, reliable and systematic tools and methods to investigate the facts, discover the unknowns and reach solutions (Gorgi, 1391, p. 103). In general, The research methods are classified according to the target criteria (fundamental, applied), the location (laboratory, field), time (retrospective, futuristic) and the method of data collection (experimental or experimental, descriptive) (Georgij, 1391).

The research method used to implement the project in terms of the purpose is applicable because applied research is the research that employs the theories, principles and techniques that are developed in the basic research to solve real and actual problems. This research focuses on the most effective action Emphasis is placed on the causes and the causes are less emphasized. This emphasis is due to the fact that applied research is directed towards the scientific use of knowledge (Khaki, 2008, p. 202). The present study is a descriptive survey and correlation between nature and method. Descriptive of the view that the present study examines the status of existence and addresses the systematic description of its current state of affairs. In this research, the researcher tries to report what is or the status quo without any interference or mental inference, and to obtain objective results from the situation (Gorgi, 1391,



p. 131), and a survey of the purpose of identifying traits and attributes, beliefs and attitudes, Behaviors and other issues of the people of a community by referring to them (Gorgi, 1391, p. 134).

Also, the present study is a correlation or consistency approach. In the correlation study, the relationship between the two groups of data is investigated; these are information provided by two or more variables in a community. In this research, the researcher wants to know if there is a correlation between the two groups or the two groups of data Is it possible? (Gorgi, 1391, p. 140). Therefore, the relationship between variables is analyzed based on the purpose of the research (Sarmed et al., 2001, p. 90).

V. STATISTICAL SOCIETY

The "statistical society" is a set of individuals, objects, or things that have a minimum or common attribute that the researcher wants to research about them. Usually, in each research, the community under study is a statistical society that the researcher wishes to study about the trait or variable of its units (Gorgi, 1391, p. 158). Therefore, according to the nature of the research and the subject matter studied, the population of this research is all 1422 employees of the post office of supervision in northern Tehran. Using the sampling table of Kerjesi and Morgan, the sample size is 303.

VI. KOLMOGOROV-SMIRNOV TEST

This test is a distribution matching test for quantitative data. If the researcher has a sample of small sizes and wants to determine whether this sample is obtained from a community with normal distribution, it will use this test. The normal test of a distribution is one of the most common tests for small samples that the researcher suspects to be normal. For this purpose, the Kolmogorov-Smirnov test is a good test. In SPSS software, this test has been used to match four different distributions of normal, Poisson, exponential and uniform. The basis of this method is the difference between the relative cumulative frequency of observations with the expected value under the zero assumption. The zero assumption states that the sample has a normal distribution (Poisson, exponential, or uniform). The Kolmogorov-Smirnov test compares the cumulative probabilities of the values in the data set with the cumulative probabilities of the same values in a particular theoretical distribution for the distribution matching. If the difference is large enough, this test will show that the data is not consistent with one of the theoretical distributions. In this test, if the significance level is less than 5%, the assumption is zero, that is, the data cannot be of a specific distribution, such as normal, Poisson, exponential, or uniform

In this study, Kolmogorov-Smirnov test was used to examine the normality of dependent variable data. The output from the statistical software in terms of the normal distribution of



variables shows that at a significant level of 5%, the zero assumption is rejected and the data are normal distribution.

VII. TEST HYPOTHESES

Table1: regression result

model	Non-standard significance coefficients		The standard significance coefficients	t	sig
	B	Standard error	beta		
1 Fixed value	1.853	.492		3.766	.009
Technical dimension	3.532	.608	4.843	5.813	.002
Organization dimension	3.621	.605	5.417	5.982	.001
Business dimension	2.032	.515	3.047	3.948	.008
Operational dimension	3.000	.627	4.629	4.786	.003

a. Dependent variable: performance

- The value of R (regression coefficient) shows that there are very strong between the four variables of business intelligence and performance ($R = .953a$)
- The R^2 values here are equal to .807, which indicates that 9.90% of the total performance changes are dependent on the four sub-trade intelligence variables.
- The next table is the variance analysis. This table shows whether the regression model can significantly explain the variation of the dependent variable. We consider the meaningful meaning of the last column (meaningful level). This pillar represents a meaningful regression model. Given that the value obtained is less than 0.05, we conclude that the model used is a good predictor of the dependent variable.
- Now we use the standardized beta coefficient resulting from the table to determine how much each of the predictive variables can predict the value. The components of the technical, organizational, business, and operational components can be predicted (since the acceptable level is meaningful less than $.05$, in other words, the sum according to the table and the values of the meaningful level, it can be concluded that between these components and There is a significant and positive correlation



Table 2: Result of second hypothesis

Model		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.492	.288		8.655	.000
	BI	.362	.233	.384	1.555	.022
	individual	.092	.073	.220	1.256	.011
	BI&individual	.561	.235	.587	2.390	.018

a. Dependent Variable: amalkard

Regarding the results of the regression as the value of sig is less than 0.05, it can be concluded that individual characteristics affect the relationship between business intelligence and employee performance.

VIII. CONCLUSION

New technologies are developing at a fast pace, so that societies, in general, and in the market, are unshakably accelerating in a special way to guarantee their survival in this turbulent arena. Organizations must accept that their philosophy of life has changed, and that viability can not be achieved by continuous profitability, and that they should seek competition and tools, because today there are fewer companies in this field traditionally away from the new rules. The game is a business, and in order to be able to keep up with the rivals or maybe hardly and skilled enough to take one step, they should have been completely dominant in the new rules of the game, so that one day it would be possible to consider itself a new rule. Therefore, the mastery of new technologies such as organizational intelligence in businesses is considered an unavoidable requirement. Organizational intelligence helps you to identify your organization's weaknesses and strengthen your strengths. In your organization, all managers and decision makers will have immediate access to all information and can use them. The management information systems only developed theoretically, and they never really responded to the needs of organizations. On the other hand, the development of new information technologies has transformed the services and performance of organizations, and each day has increased the depth and breadth of these developments (Barati, 1380). In each organization, in addition to the vast and creative human intelligent source, other factors play an important role in the process of performance of the machines. Karl Albright refers to the success of an organization's business with having a smart human agent, intelligent teams, and intelligent organizations. Albrecht



uses the title of organizational intelligence for answering and preventing mental sub consciousness. On the other hand, Albrecht states that when intelligent people are hired in an organization, they tend to be subjective or collective fist. Each of these people wants to be up and down to the presidency, so they often act individually. In order for an organization to work well with the intelligence, by understanding the situations, what information is provided to individuals, the relationships between individuals and information and the process of implementing processes should be carefully considered. Organizational intelligence in the organization, all users, as well as the relationship between them, intends to ensure that the value chain of the firm is fully covered and not subject to any process. Today, manufacturing and service organizations consider employee performance as important criteria for assessing the quality of their work, and this trend is still on the rise. The importance of employees and their performance is the subject of global competition. The discovery and recognition of employees' needs and expectations is an important factor in the success of an organization among competitors. Companies in today's world can hope for their survival and profitability by measuring their efficient and continuous performance of their employees and by trying to identify the factors influencing it to improve it. It is clear that there is a strong relationship between employee performance and survival. Managers need intelligence to make decisions. Business intelligence systems provide tools that respond to the organization's information needs appropriately. Organizational intelligence can be considered as a set of mathematical models and analytical methods for extracting information and knowledge from existing data that is used for complex decision making. In large organizations, decisions are made on an alternate basis. Some decisions may be more or less critical, or have a long-term or short-term effect, and include different individuals and roles and hierarchies. The ability to decide the knowledge workers of an organization individually and collectively is one of the important and influential factors on the productivity and competitive advantage of an organization. The main objective of the BI systems is to provide knowledge workers with tools and methods that help them make effective and timely decisions. For the proper use of organizational intelligence, Albrecht recommends three basic steps: Step One: Begin thinking of managers: The best way for senior executives in an organization is to think and talk about important actions as intelligent operations or operations. The question should always be raised by the leaders, how do we do it smarter? Step Two: Empowering employees to think: When the lowest and the simplest worker or employee of an organization believes that ideas, experiences, insights, and thoughts and ideas are taken into consideration, it is appreciated and this issue It makes the person's mental power free and leads to the creativity and initiative of the staff. Step Three: A systematic and invasive invasion of the causes of ignorance of the collective: Among the factors and causes that lead to the ignorance and recession of creativity and initiative of the staff in the organization are: 1. The organizational structure that creates gaps between the sectors and Organizational



categories. 2. Policies, laws and regulations that are in conflict with the process of values. 3. Uncompetitive, ineffective and non-dynamic managers. 4- Behavioral moderation that does not motivate people in the organization. 5. Unfair behavior that destroys the ethics and the concept of shared destiny. Today, with full confidence, it can be argued that identifying and using organizational intelligence can increase the competitiveness of an organization and differentiate it from other organizations. The necessity of reviewing organizational intelligence is currently responding to the current situation and the need of managers. The organization uses the effectiveness of organizational intelligence

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