

BUSINESS REVIEW

THE IMPACT OF BUSINESS INTELLIGENCE ON ORGANIZATIONAL EXCELLENCE: THE MEDIATING ROLE OF ORGANIZATIONAL CITIZENSHIP BEHAVIOR

Mohammadnour Mosbah Aljarrah^A, Amer Hatamleh^B, Farah H. Zawaideh^C, Hazem Mohammad Al-Kaseasbeh^D, Abdel Rahman Alkhazali^E



ARTICLE INFO

Article history:

Received 20 February 2023

Accepted 08 May 2023

Keywords:

Business Intelligence; Organizational Excellence; Organizational Citizenship Behavior; Jordanian Banks.



ABSTRACT

Purpose: The aim of this study is to examine the effect of business intelligence on organizational excellence in Jordanian banks.

Theoretical Framework: The research model determine the impact of business intelligence in its dimensions (response, flexibility and speed) on organizational excellence and studying the mediating role of organizational citizenship behavior on the relationship between business intelligence and organizational excellence.

Design/ Methodology/ Approach: The questionnaire was study's main tool for collecting data; where (240) questionnaires were distributed, and (183) questionnaires were retrieved for analysis. Analyzing data was conducted using a set of statistical methods including Cronbach's alpha along with a normality test, standard deviation, exploratory factor analysis, confirmatory factor analysis, simple linear regression and multiple regression using SPSS-V20 and AMOS -V23 software's.

Findings: The results of this study revealed that there is a statistically effect for business intelligence dimensions on organizational excellence, and There is a statistically impact for organizational citizenship behavior in improving the effect of business intelligence on organizational excellence.

Research, Practical & Social implications: Depending on the study results, banks shall provide the concept of business intelligence and its priority practices at work, as being necessary for all directors; also, they shall develop capabilities of Directors working for banks should be done by holding specialized courses.

Originality / Value: The study indicates that banks are interested to achieve a high level of organizational excellence and all that achieves this high level, through many practices, including goal setting and striving to achieve them, focusing on performing appropriate work, meeting customer requirements on time, and ensuring that employees are encouraged to innovate.

Doi: https://doi.org/10.26668/businessreview/2023.v8i5.1694

^E Assistant Professor. Management Information System, Business Intelligence and Data Analysis Department, Faculty of Business and Financial Science. Irbid National University. Irbid, Jordan.





^A Assistant Professor. Management Information System, Business Intelligence and Data Analysis Department, Faculty of Business and Financial Science. Irbid National University. Irbid, Jordan.

E-mail: m.aljaraah@inu.edu.jo Orcid: https://orcid.org/0000-0003-1666-770X

^B Associate Professor. Management Information System, Business Intelligence and Data Analysis Department, Faculty of Business and Financial Science. Irbid National University. Irbid, Jordan.

E-mail: aahatamleh@inu.edu.jo Orcid: https://orcid.org/0000-0003-1847-0492

^C Full Professor. Management Information System, Business Intelligence and Data Analysis Department, Faculty of Business and Financial Science. Irbid National University. Irbid, Jordan.

E-mail: Dr.farahzawaideh@inu.edu.jo Orcid: https://orcid.org/0000-0003-2690-828X

^D Assistant Professor. Management Information System, Business Intelligence and Data Analysis Department, Faculty of Business and Financial Science. Irbid National University. Irbid, Jordan.

E-mail: h.khaseasbeh@inu.edu.jo Orcid: https://orcid.org/0009-0002-8195-8263

O IMPACTO DA INTELIGÊNCIA DE NEGÓCIOS NA EXCELÊNCIA ORGANIZACIONAL: O PAPEL MEDIADOR DO COMPORTAMENTO DE CIDADANIA ORGANIZACIONAL

RESUMO

Objetivo: O objetivo deste estudo é examinar o efeito da inteligência de negócios na excelência organizacional em bancos jordanianos.

Referencial Teórico: O modelo de pesquisa determina o impacto da inteligência de negócios em suas dimensões (resposta, flexibilidade e velocidade) na excelência organizacional e estuda o papel mediador do comportamento de cidadania organizacional na relação entre inteligência de negócios e excelência organizacional.

Desenho/ Metodologia/ Abordagem: O questionário foi a principal ferramenta do estudo para coletar dados; onde (240) questionários foram distribuídos e (183) questionários foram recuperados para análise. A análise dos dados foi realizada usando um conjunto de métodos estatísticos, incluindo o alfa de Cronbach junto com um teste de normalidade, desvio padrão, análise fatorial exploratória, análise fatorial confirmatória, regressão linear simples e regressão múltipla usando os softwares SPSS-V20 e AMOS-V23.

Resultados: Os resultados deste estudo revelaram que há um efeito estatístico para as dimensões de inteligência de negócios na excelência organizacional, e Há um impacto estatístico para o comportamento de cidadania organizacional na melhoria do efeito da inteligência de negócios na excelência organizacional.

Pesquisa, implicações práticas e sociais: Dependendo dos resultados do estudo, os bancos devem fornecer o conceito de inteligência de negócios e suas práticas prioritárias no trabalho, como sendo necessário para todos os diretores; também, eles devem desenvolver capacidades de diretores que trabalham para bancos devem ser feitos por meio de cursos especializados.

Originalidade/Valor: O estudo indica que os bancos estão interessados em alcançar um alto nível de excelência organizacional e tudo o que alcança esse alto nível, por meio de diversas práticas, incluindo o estabelecimento de metas e a busca por alcançá-las, com foco na realização de trabalhos adequados, atendimento aos requisitos do cliente em tempo e garantindo que os funcionários sejam incentivados a inovar

Palavras-chave: Business Intelligence, Excelência Organizacional, Comportamento de Cidadania Organizacional, Bancos Jordanianos.

EL IMPACTO DE LA INTELIGENCIA EMPRESARIAL EN LA EXCELENCIA ORGANIZACIONAL: EL PAPEL MEDIADOR DEL COMPORTAMIENTO DE CIUDADANÍA ORGANIZACIONAL

RESUMEN

Propósito: El objetivo de este estudio es examinar el efecto de la inteligencia comercial en la excelencia organizacional en los bancos jordanos.

Marco Teórico: El modelo de investigación determina el impacto de la inteligencia de negocios en sus dimensiones (respuesta, flexibilidad y velocidad) sobre la excelencia organizacional y estudia el rol mediador del comportamiento de ciudadanía organizacional en la relación entre la inteligencia de negocios y la excelencia organizacional.

Diseño/ Metodología/ Enfoque: El cuestionario fue la principal herramienta del estudio para la recolección de datos; donde se distribuyeron (240) cuestionarios y se recuperaron (183) cuestionarios para su análisis. El análisis de datos se llevó a cabo utilizando un conjunto de métodos estadísticos que incluyen el alfa de Cronbach junto con una prueba de normalidad, desviación estándar, análisis factorial exploratorio, análisis factorial confirmatorio, regresión lineal simple y regresión múltiple utilizando los software SPSS-V20 y AMOS -V23.

Hallazgos: Los resultados de este estudio revelaron que hay un efecto estadístico para las dimensiones de inteligencia empresarial en la excelencia organizacional, y hay un impacto estadístico para el comportamiento de ciudadanía organizacional en la mejora del efecto de la inteligencia empresarial en la excelencia organizacional.

Implicaciones de Investigación, Prácticas y Sociales: Dependiendo de los resultados del estudio, los bancos deberán proporcionar el concepto de inteligencia de negocios y sus prácticas prioritarias en el trabajo, como siendo necesario para todos los directores; asimismo, el desarrollo de las capacidades de los Directores que trabajen para los bancos deberá realizarse mediante la realización de cursos especializados.

Originalidad/Valor: El estudio indica que los bancos están interesados en lograr un alto nivel de excelencia organizacional y todo lo que logre este alto nivel, a través de muchas prácticas, incluyendo el establecimiento de metas y esforzándose por alcanzarlas, enfocándose en realizar un trabajo adecuado, cumpliendo con los requisitos de los clientes en tiempo, y asegurar que los empleados sean alentados a innovar

Palabras clave: Business Intelligence, Excelencia Organizacional, Comportamiento de Ciudadanía Organizacional, Bancos Jordanos.

INTRODUCTION

Business organizations are currently suffering from challenges triggered by technological development, stiff competition and rapidly environmental changes, which in turn reflect in the organization workflow leading them to acquire a set of remarkable capabilities and resources to cope with these challenges and ensuring survival and continuity in the labor market. The core objective for managing organizations is how its resources and capabilities can effectively be used to positively impact on its performance and profitability. Organizational excellence can be defined as exploiting of critical opportunities by business organizations preceded by effective strategic planning and commitment to realizing a common vision with explicit objective, adequacy of resources, and ensure to provide efficient and effective services through instruments ensuring continuous progress in all aspects (Girard, 2016).

Today's organizations are considering organizational excellence by exploiting their intangible resources in the form of its human resources capabilities. However, (Nawi & Dhaif, 2011) stated that continuity of success and excellence of organizations are based on their unique resources and abilities that cannot be emulated and made up. It must integrate with each other. To achieve organizational excellence, organizations must look for appropriate ways and means. Studies have confirmed that business intelligence is an exploitation of available environmental opportunities and the ability to quickly respond to environmental variables and preserve their strategic resources and core competencies (Nafei, 2016; Okotoh, 2015).

The effect of business intelligence is reflected on citizenship behavior, as Aval (2017) defined that business intelligence can enhance citizenship behavior by clarifying work ethics, high predictability, and continuous improvement of performance. (Abdul-Hussein et al., 2019) also confirmed that there is a correlation and a positive effect of business intelligence on citizenship behavior through responsiveness, flexibility, fastness and feedback. Assi (2015) also assured that citizenship behavior is significant to realize organizational excellence. Further, Maharani (2018) underlined that citizenship behavior is critical to improve job performance and as a source of organizational competitive advantage.

RESEARCH PROBLEM

By informal interviews with some Directors working for Jordanian Banks", it was found that such banks have challenging environmental conditions, intense competition, and ongoing changes in customers' needs and demands. However, the banks should perform environmental survey to collect valuable information to achieve its long-term goals. Therefore, it should pay

attention to realizing the organizational excellence by making organizational changes for growth, and promoting its resources and capabilities for excellence. Thus, business intelligence is one of the advanced studies as a tool enabling organizations to deal with environmental assurance and changes faced by them in addition to being an essential element for the development of products and services in consistent with the ongoing changes in customers' needs and demands (Khoshlahn & Ardabili, 2016).

In reference to previous studies, it found that banking sector has been suffering many troubles, including but not limited to the lack of awareness of directors and decision-makers in banks of the importance of business intelligence and its impact on organizational excellence, which is reflected on the performance of banks as a whole.

Based on, this study aimed to realize the effect of business intelligence on organizational excellence by intermediary role of citizenship behavior that to be applied on Jordanian banks. These banks were chosen as one of the important sectors in the rapidly developing technology sector under challenges including more intensive competition, ongoing changes in customers' needs, which thereupon the banks must seek for everything that can achieve its strategies and assists in achieving excellence.

LITERATURE REVIEW AND RESEARCH HYPOTHESES

Organizational Excellence

Many organizations have challenges and constraints that affect their ability to compete and their performance to arrive at the level, which would meet its targets and fulfill customer requirements and expectations. Organizational excellence is one of the most important concepts that have already come out to include all elements and components based on excellence and superiority for high capabilities to cope with variables and situations in its external environment. It also can contribute to coherence and coordination with all its internal elements and components (Al-Ghazzawi & Mohsen, 2017).

Organizational excellence is a way of life. It could take place in large or small organizations, governmental or private, that provide services or manufacture products (Ajaif, 2008, P.227). As mentioned by (Al-Adwani, 2002), organizational excellence is related to providing an added service that exceeds the customer's expectations, and the best choice for prospective clients, in order to achieve success and continuous progress of the organization. As defined by (Al-Serafy, 2009), it is "the assessed experience of accurate and procedural

knowledge of a certain organization, which reflects the unique, successful and efficient performance directed at performing any task in a special way."

Organizational excellence is defined by (Anonymous, 2016) as the ongoing efforts to establish an internal framework of standards and processes intended to engage and motivate employees to deliver products and services that fulfill customer requirements within business expectations. Excellence and its requirements are among the most important goals and priorities that many organizations seek to achieve in a changing environment, indefinite competition and preserving organizational space and position, which results in a sense of quality and the ability to employ technology in information (Al-Meligy, 2019).

In order to achieve organizational excellence as to its business performance and results, it is necessary to realize all fundamentals on which the organizational excellence framework is based, and to strive to acquire it, seize opportunities, achieve successive successes and survive in all changing circumstances. The support of administrative leadership is for the efforts aimed at achieving organizational excellence, commitment to spread the concepts of organizational excellence, requirements for achieving it in organizations, and identifying strategic priorities. Researchers differed in choosing the requirements for achieving organizational excellence, as their determination of those requirements depended on the angle through which they looked at the issue of organizational excellence (Al-Ali, 2016). The conclusion to be drawn from the previous concepts that organizational excellence is the upgrading of the organization's performance from a culture of minimalism to a culture of perfection and excellence, to reach the best tangible results, in order to achieve customer expectations and desires and meet their requirements.

Business Intelligence

The interest in business intelligence has increased dramatically in recent years, which has resulted in significant research and practice aimed at creating individuals, teams, and organizations that are more resilient. The primary goal of business intelligence interventions is to enable organizations to compete for greater success in today's highly competitive and rapidly changing business environment.

Many studies and researchers addressed business intelligence. Some authors have defined it as the ability of organization to reach its objectives by developing its products and increasing its knowledge of its human resources, which can affect the organization growth and development within a rapidly changing environment (Zhou, San, Liu, 2023).

Business intelligence is also defined as the ability to proactively organize and respond quickly and effectively to sudden and unexpected changes in the business environment (Hamad & Yazgat, 2017). Further, it was defined as it had grounded in the lean manufacturing and features and extended to business context widely, so that it could quickly respond to environmental changes and events and manage complexity effectively (Kanten, 2017).

Business intelligence is one of the most important concepts in modern organizations operating in unstable environments, as it provides the ability for organizations to respond to continuous change and take advantage of new opportunities that appear in the business environment and unexpected customer demands (Young, 2013.) As considered by (Chamanifardet, el al., 2015), business intelligence would be significant to interpersonal flexibility and the ability to adapt effectively, and dealing with work pressures and difficult situations at work. (Teece, Peteraf & Leih, 2016) added that, as current environments are complicated, with its dynamism and turbulence, business intelligence assists banks to reconfigure their resources and deploy them in those high-return activities that create sustainable value according to internal and external factors. The importance of business intelligence also contributes to the continuous improvement of organizational processes, increasing their market share, improving the control of costs, achieving the required goals rapidly, and facing rapid changes (Dabbagh, 2017).

Dimensions of Business Intelligence

This study used dimensions based on studies of (Hamad & yazgat, 2017; Karima et al., 2018) as they are modern, contemporary and measurable dimensions. Response is the ability to identify and respond to changes quickly and smoothly, and with them interact proactively by sensing, anticipating changes, perceiving, reacting and benefiting from them (Karima et al, 2018). Response as considered by (Kuleelung, 2015) has a positive effect on organizations and on competitive advantage, as it has an impact on organizational productivity and effective marketing. Response is also the ability of organization, in agreement with its customers or partners, to reconfigure groups to form innovative movements quickly and smoothly (Hamad & Yazgat, 2017). As defined by Chang (2011), response is the ability to proactively or remedially identify and recognize changes and respond to them rapidly.

Flexibility is the ability to perform functions with considerable freedom within regulations, responsibilities and duties without violation, and using the easiest solution without transgression, negligence or omission of job duties, or making a mess within the administration,

which will negatively affect the entire performance of the entity (Al-Matrody, 2017). As defined by (Hamad & Yazgat, 2017), flexibility is the flexibility in the product size and diversity, flexibility of organization, and flexibility of individuals.

As above, flexibility can assist an organization to avoid errors and shortcomings in performance, speed in productivity, smooth growth and development of human staff that contribute to rapid performance and achievement.

Speed is defined as the ability of organization to complete or finish any work or performance in the shortest possible time. Speed is a completion of functions and operations in the shortest time, including providing new products to market, delivering of products, and rendering services in the shortest possible time (Kuleelung & Ussahawanitchakit, 2015, P. 207). Speed, as stated by (Karima et. al., 2018), is also includes taking a decision without undue haste and procrastination, starting work without delay, and urgently finding out alternative solutions for the organization.

Hypothesis (I): There is no statistically significant effect of business intelligence (response, flexibility, speed) on organizational excellence.

This hypothesis is divided into following:

Sub-hypothesis (I): There was no statistically significant effect of the response on organizational distinction.

Sub-hypothesis (II): There was no statistically significant effect of flexibility on organizational excellence.

Sub-hypothesis (III): There was no statistically significant effect of speed on organizational excellence

Hypothesis (II): There was no direct impact of business intelligence on organizational citizenship behavior.

Organizational Citizenship Behavior

Citizenship is one of the contemporary issues that attracted researchers' interest in seeking to diagnose its content and define its dimensions, and then try to think about finding organizational models capable of investing the idea of citizenship as a challenge that raises the organization's management. Since the eighties of the last century, interest in the concept of organizational citizenship behaviors has increased, which is an indeterminate behavior and is not formally linked to incentive systems and evaluation of performance in organizations, which is a significant behavior for all organizations (Khalil, 2018). There have been numerous studies

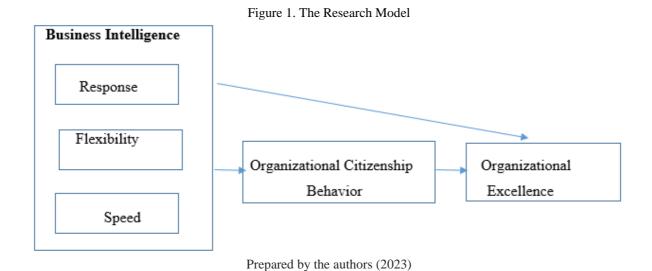
concerned with voluntary behavior in organizations. Various other terms have been used later as synonyms for organizational citizenship behavior since its inception, such as: additional role behavior, contextual performance, social support behavior, organizational spontaneity or organizational automated, and behavior beyond the roles (Geus, Ingrams, Tummers & Pandey, 2020). However, the term organizational citizenship behavior is the most common and used in the studies of other researchers (Organ, 1997).

(Qiu, Lou, Zhang & Wang (2020) added that organizational citizenship behavior is a proactive behavior, which means that employees are more likely to choose to engage in organizational citizenship behavior to satisfy their motivation. The importance of organizational citizenship behavior stems from it being a voluntary behavior that aims to raise the effectiveness level of organizations, where employees perform more than the duties assigned to them and strive to achieve a higher performance than expected. Based on, the contemporary organizations require operating in a highly competitive changing environment and relying on work teams that require cooperation and volunteering to serve team members.

Hence, the organizational citizenship behavior in important for individuals by providing the ability to create, innovate, enhance ideas and proposals, enhance motivation for achievement and a sense of responsibility. In addition, it is importance for the organization to reduce rates of work turnover and absence, which leads to organizational stability, increasing performance and efficiency rates, enhancing mutual trust, and reducing organizational conflicts (Al-Farajani, 2017).

Hypothesis (III): There was no statistically significant effect of organizational citizenship behavior as a medium variant between business intelligence and organizational excellence.

Hypothesis (**IV**): There was no direct impact of organizational citizenship behavior on organizational excellence.



METHODS

Sample and Data Collection

This study used the descriptive and analytical approach in order to study the effect of business intelligence on organizational excellence with organizational citizenship behavior as a medium variant. The study population consists of all Directors working with Jordanian banks. Due to the large size of the study population and the inability to access it, the researcher used easy-to-read sample to collect data from respondents (Sekaran, 2010). (240) questionnaires were distributed and only (183) were returned, with a response rate of 76%. This number of responses is useful for statistical analysis purposes. Data were collected based on both interviews with target banks and questionnaire that was distributed to study population, which is the main tool for data collection.

Study tool

The questionnaire consists of the following parts:

Part I: Questions on demographics (gender, age, educational qualification, nature of work and experience)

Part II: Questions on independent variable "business intelligence" (response, flexibility and speed).

Part III: Questions on dependent variable (organizational excellence).

Part IV: Questions on medium variant (organizational citizenship behavior).

Data Analysis

To answer the study questions and test its hypotheses, the Statistical Package for Social Sciences was used (SPSS version 20).

For achieving the study objectives, the following statistical methods were used:

- 1) Frequencies and percentages to describe sample characteristics.
- 2) Exploratory factor analysis (EFA) in order to test correlations between independent and dependent variables.
- 3) Confirmatory Factor Analysis (CFA) using AMOS to test hypotheses based on relevant measurements supported by previous studies of independent and dependent variables.
- 4) Cronbach's alpha to measure the reliability of study tool (questionnaire) and the volume of its internal consistency.
- 5) Arithmetic mean to set the level of respondents other than variables.
- 6) Standard deviation to measure the fragments degree of respondents other than its arithmetic mean.
- 7) A simple regression was used to examine the effect of independent variable dimensions on dependent variable.
- 8) Multiple Linear Regression was used to predict the elements of dimension that have a greater influence on the dependent variable.
- 9) Variance Amplification Factor (VIF) and tolerance was used to ensure that the independent variable does not have a problem with multiple linear.

Personal and job attributes of the study sample

Table 1: Description of personal and job variables of the study sample

Variable	Category	Frequency			
Gender	Male	121			
Gender	Female	62			
	Less than 30	34			
	30 - less than 36	39			
Age	36 - less than 41	53			
Age	41 - less than 46	43			
	46 and over	14			
	Total	183			
	High school or Diploma	29			
	BA	81			
Education	Higher Diploma	12			
	MA	57			
	PhD	4			

	Total	183			
	Director General	0			
	Deputy Director General	14			
	Head of Department	36			
Job	Unit Manager	23			
	Administrator	73			
	Technician	37			
	Total	183			
	5 and less	82			
	6-10	58			
Years	11-15	27			
of experience	16 and over	16			
	Total	183			

Prepared by the authors (2023)

Validity of the Study Tool

Exploratory Factor Analysis

Exploratory Factor Analysis EFA was used to assess validity of the independent variable (business intelligence), dependent variable (organizational excellence) and the medium variant (organizational citizenship behavior). For performing the EFA, factor loadings (total variance tells how much variance is explained by all factors) should not be less than 40% (Laher, 2010). Kaiser-Meyer-Olkin (KMO) is a test used to determine the sampling adequacy of data that are to be used for factor analysis. The test value must be between (0-1). Practically, the value of (0.50) or more is adequate data (Hair, Black, Anderson & Babin, 2010). Barlett's test is a test used to predict that the correlation matrix for variables is an identity matrix (zero matrix). Practically, the test is provided with a value representing a type I error ($\alpha \le 0.05$).

Confirmatory Factor Analysis

The chi-square test is the inferential test that uses probability to accept or reject a goodness-of-fit; Desire condition is that the probability of chi-square test is> 0.05 indicating that there are no statistical differences between the real model (actual measured model) and theoretical model. The AMOS V.23 program was used to calculate appropriate indicators of independent variable.

The results shows that the value of chi-square $\chi 2$ of independent variables in dimensions is great at the level of $(0.05 \ge \alpha)$, where Degrees of Freedom (DF) reached 74. It was found that the minimum variance value (quotient of $\chi 2$ divided by DF) was 3.312, which reflects that the independent variables in their dimensions have a goodness-of-fit. Arbuckle (2008) suggested that the minimum variance value should not exceed 5. In light of standardized regression

weights, known as validity or saturation coefficients, which are assumed to be no less than 0.50 (Mezo & Short, 2012).

The results also show the indicators of overall compatibility for scale of the independent variables, such as GFI value, which is 0.900, AGFI value that is 0.901, and both values are close to (1). The fitness index values were: 0.892 for NFI, 0.903 for TLI and 0.921 for CFI, which are close to 1. Similarly, The Root Mean Square Error of Approximation (RMSEA) value was equal to 0.071, which is very close to zero. It indicates the quality of matching and paragraphs validity of independent variables with their dimensions.

RESULTS

Independent Variable Analysis (Business Intelligence):

The results indicate the values of the arithmetic mean of independent variable dimensions (business intelligence), as the results showed that the arithmetic mean of these variables ranged between (3.74 - 4.03) with total average of (3.91) on 5-point Likert scale, which indicates that the level of business intelligence is high. The also results showed that the speed dimension scored the highest arithmetic mean ranking first with value of (4.03), while the response to that dimension scored the lowest arithmetic mean ranking third with value of (3.74).

Analysis of Dependent Variable (Organizational Excellence):

The results show values of the arithmetic mean, standard deviations, value of t-test, and significance level for paragraphs of dependent variable (organizational excellence). The results showed that the arithmetic mean of these variables ranged between (3.52 - 4.01) with total average of (3.92) on 5-point Likert scale, which indicates that the level of organizational excellence is high. "Your company seeks to achieve a new competitive position among competitors" came in the first place, with an average of (4.01). While the paragraph "The Senior Management ensures that employees should participate in the training courses to develop their skills," came in the seventh and last place, with mean of (3.52). The arithmetic mean of all respondents' answers on paragraphs related to sub-variable with value of (3.92), means obviously that there is a high level of organizational excellence.

Analysis of Medium Variant (Organizational Citizenship Behavior):

The results show the values of the arithmetic mean, standard deviations, value of t-test, and significance level for paragraphs of the medium variant (organizational citizenship behavior). The results revealed that the arithmetic mean of these variables ranged between (3.52-3.78) with total mean of (3.71) on 5-point Likert scale. It revealed that the level of organizational citizenship behavior is high. Paragraph "The company management encourages employees and branches to share knowledge among them" came in the first place, with a mean of (3.78). While paragraph "The company management seeks to develop open relationships with employees" came in the eighth and last place, with a mean of (3.52). The arithmetic mean of all respondents' answers on paragraphs related to sub-variable with value of (3.71), means obviously that there is a high level of organizational citizenship behavior.

Test Hypotheses of the Study

Test of hypothesis (I):

H01: There was no statistically significant effect of business intelligence (response, flexibility, speed) on organizational excellence at a level of statistical significance ($\alpha \le 0.05$) from perspective of Directors working for Jordanian banks.

To test the previous hypothesis, a Multiple Regression Analysis was used, and the following table shows the results of that analysis:

Table 2. Results of Multiple Regression Analysis Test for the effect of business intelligence on organizational excellence

Dependent variable	Model summary		ANOVA		Coefficients						
e nt	R	R^2	R^2	F Cal.	DF		Sig.	β		T Cal.	Sig.
Organization al excellence	0.847	0.718	0.715	228.249	Regression	3	0.00	Response	0.341	6.849	0.00
nce					Remaining	269		Flexibility	0.075	2.085	0.038
e n					Total	272		Speed	0.522	10.219	0.00

Prepared by the authors (2023)

Table 2 shows that the value of (R = 0.847), which means that there is a positive correlation value (84.7%), which is high between (business intelligence) and (organizational excellence) in banks. The value of coefficient of determination $(R^2 = 0.718)$, which means that the variance in (business intelligence) is clearer (71.8%) than the variance in (organizational

distinction), where the analysis of variance shows that the value of (F) has reached (228.249) at (sig = 0.00), which confirms the importance of the regression at ($\alpha \le 0.05$).

As noted above, results of the analysis revealed that there was a statistically significant effect of business intelligence (response, flexibility, speed) on organizational excellence at $(\alpha \le 0.05)$ from the perspective of Directors working for Jordanian banks. All T-values are statistically significant.

Test of Sub-hypothesis (I):

H0.1.1: There was no statistically significant effect on the response to organizational excellence at ($\alpha \le 0.05$) from prospective of Directors working for Jordanian banks.

To test the previous hypothesis, Simple Linear Regression Analysis was used. It is noted from the results of the analysis that there is a statistically significant effect on the response to organizational excellence at a level of statistical significance ($\alpha \le 0.05$) from perspective of Directors working for Jordanian banks, where the value of T was statistically significant.

Test of sub-hypothesis (II):

H0.1.2: There was no statistically significant effect of flexibility on organizational excellence at ($\alpha \le 0.05$) from perspective of Directors working for Jordanian banks.

To test the previous hypothesis, Simple Linear Regression Analysis was used. It is noted from the results above that there was a statistically significant effect of flexibility on organizational excellence at ($\alpha \le 0.05$) from perspective of Directors working for Jordanian banks, where the value of T was statistically significant.

Test of sub-hypothesis (III):

H0.1.3: There was no statistically significant effect of speed on organizational excellence at $(0.05 \ge \alpha)$ from perspective of Directors working for Jordanian banks.

To test the previous hypothesis, Simple Linear Regression Analysis was used. It is noted from the results above that there was a statistically significant effect of speed on organizational excellence at ($\alpha \le 0.05$) from perspective of Directors working for Jordanian banks, where the value of T was statistically significant.

Test of hypothesis (II):

H02: There was no statistically significant effect of citizenship behavior as a medium variant between business intelligence and organizational excellence at ($\alpha \le 0.05$) from perspective of Directors working for Jordanian banks.

Path analysis was used through AMOS V.23 to reveal the effect of business intelligence on organizational excellence with organizational citizenship behavior as a medium variant. It is noted that there was a statistically significant effect of business intelligence on organizational excellence with organizational citizenship behavior as medium variant. The value of the Squared Multiple Correlation for organizational excellence was (R2 = 0.864); i.e. (0.864) value of the change in organizational excellence resulting from the change in business intelligence.

The value of Squared Multiple Correlation for organizational citizenship behavior was (R2 = 0.648); i.e. (0.648) value of the change in organizational citizenship behavior resulting from the change in business intelligence.

All T-values were statistically significant at ($\alpha = 0.05$). This result indicates that there is an effect of business intelligence on organizational excellence with organizational citizenship behavior as an intermediate variable, as increasing interest in business intelligence would generate an impact on organizational citizenship behavior and organizational excellence.

Test of Hypothesis (III):

H03: There was no direct impact of business intelligence on organizational citizenship behavior at ($\alpha \le 0.05$) from perspective of Directors working for Jordanian banks.

To test the previous hypothesis, Simple Linear Regression Analysis was used. The value of the Squared Multiple Correlation for organizational citizenship behavior was (R2 = 0.589), which means that (0.589) of the change in organizational citizenship behavior resulted from the change in business intelligence.

All T-values were statistically significant at ($\alpha = 0.05$), and this result indicates that there is an effect of business intelligence on organizational citizenship behavior, as increased attention to business intelligence would generate an effect on organizational citizenship behavior.

Test of hypothesis (IV):

H04: There was no direct impact of organizational citizenship behavior on organizational excellence at $(\alpha \le 0.05)$ from perspective of Directors working for Jordanian banks.

To test the previous hypothesis, Simple Linear Regression Analysis was used. The value of the Squared Multiple Correlation for organizational excellence was (R2 = 0.634), which means that (0.634) of the change in organizational excellence resulted from the change in the behavior of organizational citizenship.

All T-values were statistically significant at ($\alpha = 0.05$), and this result reveals that there is an effect of organizational citizenship behavior on organizational excellence, as increasing interest in organizational citizenship behavior would generate an impact on organizational excellence.

DISCUSSION

The results of hypothesis (I) showed that there is an important statistical effect for all dimensions of business intelligence in the organizational excellence. Where coefficient of determination is (0.751), and the level of statistical significance is less than (0.05), which means that banks follow strategies that enable them to enhance the dimensions of business intelligence (response, flexibility and speed), and that business intelligence statistically affects in (organizational excellence).

The researcher attributes this result to the fact that banks devotes attention to business intelligence by encouraging and motivating employees to provide ideas and proposals and facilitate the exchange of information and experiences between them and management. On the other hand, it leads to many positive results, most notably bringing a high quality of organizational excellence. It will lead to positive results, including goals achievement and increasing competitiveness in business environment.

The result above is consistent with the study of (Ali, 2016), which showed a positive relationship between business intelligence and high performance. The results of this study are also in agreement with the study of (Alhadid, 2016), which revealed a positive impact of business intelligence on organizational performance of IT institution operating in Jordan. Further, this result is consistent with the study of (Al-Omari, 2017), which indicated that the organizational change has had a significant impact on organizational excellence, and organizational change has had a major impact on organizational excellence. It is also in agreement with the study of (Andrews, 2019), which showed that the use of business intelligence instruments affects the ability to face the renewed changes in the surrounding environment.

The results of this study revealed a statistically significant effect of organizational citizenship behavior as a medium variant between business intelligence and organizational excellence at ($\alpha \le 0.05$) from perspective of Directors working for Jordanian banks. The value of coefficient of determination for organizational excellence was ($R^2 = 0.864$), which explains

that (4.86%) of the variance in the dependent variable related to organizational excellence resulting from the change in business intelligence.

The value of coefficient of determination for organizational citizenship behavior was $(R^2 = 0.648)$, which means that (64.8%) of variance in the variable of organizational citizenship behavior resulted from the change in business intelligence. Based on, it indicates that (organizational citizenship behavior) as a medium variant has a positive effect between business intelligence and organizational excellence, and this effect was statistically significant.

The researcher illustrates the percentage of improving and increasing the impact of business intelligence dimensions (response, flexibility and speed) on organizational excellence with organizational citizenship behavior in banks. Therefore, it can achieve organizational citizenship behavior by increasing staff competency, business efficiency, and enabling banks to realize the required strategic success and goals. It can also improve the abilities of banks to avoid challenges it may face in business environment, for higher excellence, and ability to continue and compete.

This result is consistent with the study of (Khalil, 2018) that revealed a positive relationship between organizational citizenship behaviors and fighting administrative corruption. This result is also in line with the study of (Aval, 2017), which indicated that there was a positive effect of organizational citizenship behavior on business intelligence , as the elements of organizational citizenship can significantly predict business intelligence resulting in an increase in business intelligence .

The results of the study revealed a statistically significant effect of business intelligence on organizational citizenship behavior at ($\alpha \le 0.05$) from the perspective of Directors working for Jordanian banks. The value of coefficient of determination for organizational citizenship behavior was ($R^2 = 0.589$), which means that (9.58%) of variance in dependent variable of organizational citizenship behavior resulted from the change in business intelligence. It indicates that business intelligence has a positive effect on organizational citizenship behavior, and this effect was statistically significant.

The researcher explains the percentage of improving and increasing the impact of business intelligence dimensions (response, flexibility and speed) on organizational citizenship behavior. The business intelligence enables banks to avoid challenges it may face in business environment, and realize the required strategic success and goals. In addition, it enables these Banks to improve its staff performance, which in turn affect the performance of banks. This

result is consistent with the study of (Mahdi, Noorullah, Jasim, 2023), which revealed that there was a positive relationship between Financial Intelligence and Leadership in Business.

The results of the study showed that there is a statistically significant effect of organizational citizenship behavior on organizational excellence at ($\alpha \le 0.05$) from perspective of Directors working for Jordanian banks. The value of the coefficient of determination for the organizational excellence was ($R^2 = 0.634$), which means that (4.63%) of variance in dependent variable of organizational excellence resulted from the change in organizational citizenship behavior.

It indicates that organizational citizenship behavior has a positive effect on organizational excellence behavior, and this effect was statistically significant. The researcher discusses this percentage of improving and increasing the impact of organizational citizenship behavior on organizational excellence, as organizational citizenship behavior will improve and increase the staff performance of banks, which in turn can increase the Banks productivity for organizational excellence. This result is in conformity with the study of (Al-Shorouki, 2018) that reflected a positive relationship between organizational citizenship behavior and organizational excellence.

CONCLUSION

Depending on the results above, banks shall provide the concept of business intelligence and its priority practices at work, as being necessary for all directors, develop capabilities of Directors working for banks should be done by holding specialized courses, workshops and discussions in this field and Develop aspects in which Directors working for banks need it in terms of response, flexibility and speed in order to become more able to cope with changes for increasing cooperation and support by Senior Management.

The relative importance of organizational excellence in banks came at a high level. It indicates that these banks are interested to achieve a high level of organizational excellence and all that achieves this high level, through many practices, including goal setting and striving to achieve them, focusing on performing appropriate work, meeting customer requirements on time, and ensuring that employees are encouraged to innovate. The relative importance of organizational citizenship behavior variable is generally high, which means that banks are among leading banks interested in organizational citizenship behavior. It should pay attention to raise the level of organizational excellence at different levels. There is a statistically significant impact of business intelligence on organizational excellence in banks, which require

them to continuously paying attention to dimensions of business intelligence (response, flexibility and speed) in order to maintain a high level of organizational excellence and effectiveness in performance, and to secure its validity and survival in a competitive environment.

REFERENCES

Ajaif, M. (2008). Culture of Excellence in Some Semi Government Organizations in Dubai", Paper for Quality Congress Middle East2 Creating an Architecture of Quality and Excellence in the Middle East: Responsibilities: Challenges and Strategies, Dubai: e-TQM College.

Alhadid, A.Y. (2016) The Effect of Organization Agility on Organization Performance. International Review of Management and Business Research. ISSN: 2306-9007, Vol. 5 Issue.1

Alzoubi, A. E., Al-otoum, F. J., & Albatainh, A. K. (2011). Factors Associated affecting Organization Agility on Product Development. International Journal of Research and Reviews in Applied Sciences, 9, 503-515.

Arokodare M.Asikhiia O. and Makinde,G.(2019) Strategic Agility and Firm Performance: The Moderating Role of Organisational Culture. Business Management Dynamics Vol.9, No.03, Sep 2019, pp.01-12

Attafar, A., Ghandehari, M., & Momeni, G., (2012)," Study of Required Organizational Base for Implementation of Agility", Interdisciplinary Journal of Contemporary Research in Business, Vol. 3, No. 11, pp. 180-190.

Aval, S; Haddadi, E; keikha, A (2017). Investigating the effect of organizational citizenship behavior) OCB(components on organizational agility. Interdisciplinary journal of education, 1(1), 59-67.

Chamanifard.R, Nikpour.A, Chamanifard.S, Nobarieidishe.S.,(2015)," Impact of organizational agility dimensions on employee's organizational commitment in Foreign Exchage Offices of Tejarat Bank, Iran", Journal of Natural and Social Sciences, Vol. 1, pp. 199-207.

Chamanifard.R, Nikpour.A, Chamanifard.S, Nobarieidishe.S.,(2015)," Impact of organizational agility dimensions on employee's organizational commitment in Foreign Exchage Offices of Tejarat Bank, Iran", Journal of Natural and Social Sciences, Vol. 1, pp. 199-207.

Dahmardeh, N. & Banihashemi, Sayyid Ali. (2010). Organizatinal agility and agile manufacturing. European Journal of Economics, Finance and Administrative Sciences. 178-184.

Darvishmotevali, M., Tajeddini, K., (2019). Understanding organizational agility: Evidence from the hotel industry in Iran. In: Tajeddini, K., Ratten, V., Merkle, T. (Eds.), Tourism,

Hospitality and Digital Transformation: Strategic Management Aspects. Innovation and Technology Horizons.

David.G, Bruce. C, Brett. R, Jolyon.S , Penny.B , Joanna.R , (2018) "Applying an organisational agility maturity model", Journal of Organizational Change Management, https://doi.org/10.1108/JOCM-10-2017-0398

Dehaghan, Z. A.; Pourtaher, M. (2014). A study on effective factors on organizational excellence based on Booneh and Johnson model: case study Medical Science University of Yasuj, WALIA Journal, 30(S2), 141-146.

Denning, S. (2019). The quest for genuine business agility. Strategy & Leadership. Denzin, N. K. (2012). Triangulation 2.0. Journal of mixed methods research, 6(2), 80-88.

Edgeman, R. (2018). Excellence models as complex management systems: An examination of the Shingo operational excellence model. Business Process Management Journal, 24(6), 1321–1338.

Erande, A., & Verma, A. (2008). Measuring Agility of Organizations- A Comprehensive Agility Measurement Tool (CAMT). Old Dominion University, Proceedings of the 2008 IAJC-IJME International Conference.

Geus, C. J., Ingrams, A., Tummers, L., & Pandey, S. K. (2020). Organizational Citizenship Behavior in the Public Sector: A Systematic Literature Review and Future Research Agenda. Public Administration Review, 80(2), 259-270

Hair 'J 'F 'Black 'W. C'Babin 'B. J 'Anderson 'R 'E 'and Tatham 'R 'L.(2010). Multivariate Data Analysis (6thed): Prentice Hall.

Hamad, Zaina & Yozgat, Uğur. (2017). Does organizational agility affect organizational learning capability? Evidence from commercial banking. Management Science Letters. 7. 10.5267/j.msl.2017.5.001.

Hayat Bhatti, M., Ju, Y., Akram, U., Hasnat Bhatti, M., Akram, Z., & Bilal, M. (2019). Impact of participative leadership on organizational citizenship behavior: Mediating role of trust and moderating role of continuance commitment: Evidence from the Pakistan hotel industry. Sustainability, 11(4), 1170

Khoshlahn, M., & Ardabili, F. S. (2016). The Role of Organizational Agility and Transformational Leadership in Service Recovery Prediction. Procedia Social and Behavioral Sciences, 230, 142–149. doi: 10.1016/j.sbspro.2016.09.018.

Kuleelung, T. &Ussahawanitchakit, P., (2015), "Organizational agility and firm performance: evidence from information and communication technology (ICT) businesses in Thailand", The Business and Management Review, Vol..7, No.1, pp. 206-217.

Laher, S. (2010). Using exploratory factor analysis in personality research: Best-practice recommendations. SA Journal of Industrial Psychology | Vol 36, No 1 | a873 | DOI: https://doi.org/10.4102/sajip.v36i1.873

Maharani, Vivin & Troena, Eka & Noermijati, Noermijati. (2013). Organizational Citizenship Behavior Role in Mediating the Effect of Transformational Leadership, Job Satisfaction on Employee Performance: Studies in PT Bank Syariah Mandiri Malang East Java. International Journal of Business and Management. 8. 10.5539/ijbm.v8n17p1.

Mahdi, F. S., Noorullah, A. S., & Jasim, R. H. (2023). Supporting the Internal Control of Banks with the Methods of Performance and Financial Intelligence to Achieve Leadership in Business: an Analytical Study of a Sample of Iraqi Banks. International Journal of Professional Business Review, 8(2), e01160.

Mezo, P. G., & Short, M. M. (2012). Construct validity and confirmatory factor analysis of the Self-Control and Self-Management Scale. Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement, 44(1), 1–8

Mohamed, M. S., Khalifa, G. S., Nusari, M., Ameen, A., Al-Shibami, A. H., & Abu-Elhassan, A. E. (2018). Effect of Organizational Excellence and Employee Performance on Organizational Productivity Within Healthcare Sector in the UAE. Journal of Engineering and Applied Sciences, 13(15), 6199-6210.

Nafei, W.A (2016). The Role of Organizational Agility in enhancing organizational excellence: A study on telecommunications sector in Egypt. International Journal of Business and Management; Vol. 11, No. 4; 2016

Nafei, Wageeh (2016) Organizational Agility: The Key to Organizational Success. International Journal of Business and Management 11(5):296 • April 2016.

Okotoh, M.A. (2015). The Perceived Effect of Reward Management Practices on Factors Influencing Employee Retention at Communications Authority Of Kenya. Master. Thesis. University of Nairobi, Kenya.

Organ, D.(1997) Organizational Citienship Behavior: Its construct clean-Up Time, Human Performance, 10(2):85-97.

Pinar.M; Girard.T, (2008). Investigating the Impact of Organizational Excellence and Leadership on Achieving Business Performance: An Exploratory Study of Turkish Firms. The SAM Advanced Management Journal. Vol. 73, No. 1, Winter 2008, pp. 29-45

Qiu, Y., Lou, M., Zhang, L., & Wang, Y. (2020). Organizational Citizenship Behavior Motives and Thriving at Work: The Mediating Role of Citizenship Fatigue. Sustainability, 12(6), 2231.

Qiu, Yang & Lou, Ming & Zhang, Li & Wang, Yiqin. (2020). Organizational Citizenship Behavior Motives and Thriving at Work: The Mediating Role of Citizenship Fatigue. Sustainability. 12. 2231. 10.3390/su12062231.

Sadeghi, Ghasem & Ahmadi, Masoud & Yazdi, Maryam. (2016). The relationship between organizational citizenship behavior and organizational performance (case study: Agricultural Jihad Organization of Mazandaran Province). Problems and Perspectives in Management. 14. 317-324. 10.21511/ppm.14(3-si).2016.03.

Sekaran, U. (2010) Research Methods for Business: A Skill-Building Approach. 4th Edition, John Wiley & Sons, UK.

Teece, D., Peteraf, M., & Leih, S. (2016). Dynamic capabilities and organizational agility: Risk, uncertainty, and strategy in the innovation economy. California Management Review, 58(4), 13–35.

Walter, AT. (2020). Organizational agility: ill-defined and somewhat confusing? A systematic literature review and conceptualization. 10.1007/s11301-020-00186-6, 2198-1639.

Young .A.G., (2013), "Identifying The Impact of Leadership Practices on Organizational Agility, ", partial fulfillment of the requirements for the degree of Master of Science in Organization Development, Pepperdine University.

Zhou, J., San, O. T., & Liu, Y. (2023). Design and Implementation of Enterprise Financial Decision Support System Based on Business Intelligence. International Journal of Professional Business Review, 8(4), e0873.