

# THE IMPACT OF SUCCESS FACTORS OF BUSINESS INTELLIGENCE ON ORGANIZATIONAL INNOVATION AT INSURANCE COMPANIES IN JORDAN

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## ABSTRACT

*The study aimed at revealing the impact of success factors of business intelligence on organizational innovation at insurance companies in Jordan. The problem of the study is represented in organizational innovation at insurance companies in Jordan; as organizational innovation has become a priority for scientific research and development for any organization; recent developments in various fields have imposed on contemporary organizations to respond and adapt to these developments, to ensure their continuity and interaction with society, environment, and all the influencing factors surrounding them; Many organizations have sought to pay attention to business intelligence through infrastructure, technology, and organizational innovation, The quantitative approach was used in the study, and for the purposes of data collection, a questionnaire was developed, where is the study community of the 24 companies operating at insurance sector in Jordan sample of employees working in it was taken with an amount of (342) employee, The statistical package for the social sciences was used to collect and analyze data, The study concluded that there is a statistically significant effect at the level of significance ( $\alpha \leq 0.05$ ) for the success factors of business intelligence in terms of their dimensions (top management support, user-oriented change management, team building skills, project planning, integration of sustainable data quality, clear vision) on organizational innovation, and the study recommended a set of recommendations, including increasing awareness among all sectors of the importance of success factors for business intelligence that make them keep pace with recent developments in various fields to enhance organizational innovation.*

**Keywords:** Success Factors of Business Intelligence, Organizational, Innovation, Insurance Companies, Jordan.

## INTRODUCTION

In light of the current economic and technological changes and developments, modern organizations seek to excel, improve their competitive position, and ensure sound decisions are taken at the right time, which leads them to rely on administrative approaches that allow them to keep pace with these changes, the most important and recent of which are business intelligence; This is because business intelligence is one of the modern terms that is gaining increasing importance in economics and management, as it is linked to several fields of knowledge. It is the result of technological development (Abu N, 2020).

To achieve greater efficiency, Organizations must learn how to apply success factors to business intelligence; the topic of business intelligence enables users within the company to collect, store and analyze company data to help rationalize decisions, As most companies in the world seek to raise the level of their competitiveness, or at least stay within the circle of competition and try to find more innovative ways to attract customers, by providing good and new services. This hard work requires quick decisions based on a clear vision for the company (Al-hawajreh, 2018).

Innovation is an essential aspect of the performance of organizations and nations because innovation allows organizations to react to changes quickly; In order to be able to find products and discover new markets, there is also a widespread interest in innovation because of its importance for organizations, economies, and markets to become more dynamic than ever before markets, structures, and dynamics (Chang et al., 2021).

### Study Problem

The problem of the study is represented in organizational innovation at insurance companies in Jordan. As organizational innovation has become a priority for scientific research and development for any organization; Recent developments in various fields have imposed on contemporary organizations to respond and adapt to these developments, to ensure their continuity and interaction with society and the environment, and all the influencing factors surrounding them; Many organizations have sought to pay attention to business intelligence through infrastructure, technology, and organizational innovation.

### Study Questions

What is the impact of business intelligence success factors on organizational innovation at insurance companies in Jordan? Depending on the central question identified in the study problem, the following sub-questions can be identified:

What is the relative importance of success factors for business intelligence in insurance companies?

What is the relative importance of organizational innovation in insurance companies?

### Study Hypotheses

**The first primary hypothesis: Ho1:** There is no statistically significant effect at the level of significance ( $\alpha \leq 0.05$ ) for the success factors of business intelligence in terms of its dimensions (senior management support user-oriented change management, team building skills, project planning, integration of sustainable data quality, clear vision) on organizational innovation in terms of its combined dimensions (management innovation, product innovation, process innovation) at insurance companies in Jordan. From the first main hypothesis, the following sub-hypotheses emerge:

**The first sub-hypothesis: Ho1-1:** There is no statistically significant effect at the level of significance ( $\alpha \leq 0.05$ ) for the success factors of business intelligence in terms of its dimensions (top management support, user-oriented change management, team building skills, project planning, integration of sustainable data quality, clear vision) on managerial innovation in insurance companies.

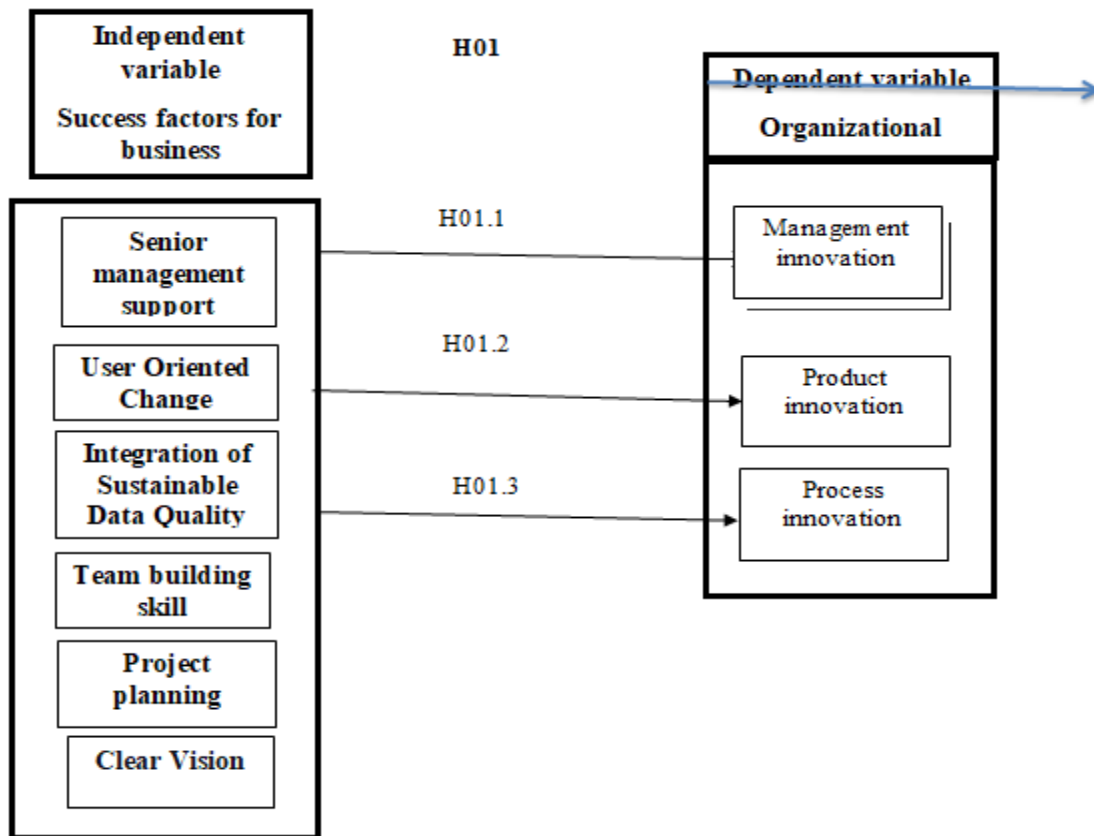
**The second sub-hypothesis: Ho1-2:** There is no statistically significant effect at the level of significance ( $\alpha \leq 0.05$ ) for business intelligence success factors in terms of their

dimensions (top management support, user-oriented change management, team building skills, project planning, integration of sustainable data quality, clear vision) on product innovation in insurance companies.

**The third sub-hypothesis: Ho1-3:** There is no statistically significant effect at the level of significance ( $\alpha \leq 0.05$ ) for business intelligence success factors in terms of their dimensions (top management support, user-oriented change management, team building skills, project planning, integration of sustainable data quality, clear vision) on process innovation in insurance companies.

## Study Model

Figure 1 indicates the study model, which includes variables and dimensions of each variable. The model was developed based on the following references: (Aminova & Marchi, 2021; Chaudhry & Dhingra, 2021; Abu Nasser, 2020; Al-hawajreh, 2018; Eidizadeh et al., 2017; Bader, 2017, Abu et al., 2015).



**FIGURE 1**  
**STUDY MODEL**

## Theoretical Framework and Previous Studies

### Theoretical Framework

Organizations in all forms strive for excellence and to remain at the highest levels of competition. Hence, they raise their competitiveness by providing excellent and new services, which requires making confidential and correct decisions based on valid and accurate information (Jahantigh et al., 2019). Organizations may face changes, most of which are unexpected and unresolved results; this is because the satisfaction of the beneficiaries is a goal that organizations seek to gain, so the organization is subject to enormous pressures from its competitors, hence the importance of business intelligence that aims to accommodate the current situation and rapid changes through rapid monitoring, providing accurate information and predicting changes that may affect the organization and gaining new opportunities for the benefit of the organization. The management makes the best decision using accurate and timely information, and business intelligence solutions help improve business performance at all levels (Abul Fotouh et al., 2016). Accordingly, the importance of business intelligence appears in giving organizations the ability to take in-depth knowledge about all factors related to the success of the organization's plans and objectives, enabling it to make its decisions, organize its long and short plans, and create an appropriate atmosphere to take appropriate methods for performance improvement and development procedures (Abu K., et al., 2015).

### Success Factors for Business Intelligence

The critical success factors for business intelligence are management practices that can lead directly or indirectly to the project's success. There are a set of success factors necessary to achieve success in business intelligence due to its importance, and among these factors are the following:

**Senior management support:** The commitment and support of senior management in the organization is the most critical factor in implementing business intelligence systems, as experts agree that continuous support by business people facilitates securing the resources necessary for operations such as financing operations, human skills development, and other needs at all stages of the business process execution (Kasemsap, 2018).

**User-oriented change management:** The presence of a user-oriented change management effort is one of the factors, as experts believe that better user participation in the change process can lead to better communication with him and knowledge of his requirements and needs, which has an active and positive role in successful implementation (Abul Fotouh et al., 2016).

**Team building skills:** All interviews with experts confirmed that the skill of forming a development team significantly affects the successful implementation of business intelligence systems. Development team should consist of individuals who possess technical expertise and have a strong business background; because business intelligence systems are a business-driven enterprise to provide and enhance management decision support (Richards et al., 2019).

**Project planning:** After the successful implementation of business intelligence systems, an important factor must be taken into account, which is project planning in order to determine the proper scope, as planning allows the development team to focus on the best opportunities for improvement, which helps to set clear standards for work and develop a shared understanding of them (Abul Fotouh et al., 2016).

**Integration of sustainable data quality:** Data and information quality is a critical factor. Incorporating data into business intelligence systems for analysis helps in decision-making, as data quality is necessary for business intelligence to be achieved. (Kasemsap, 2018).

**Clear vision:** The organization's strategic vision is directed to the application, and it is one of the most important things that must be taken into account to move the business organization. A long-term vision is necessary to prepare a well-established business organization. The result of business intelligence systems (Rostami, 2014).

## Concept of Organizational Innovation

There are many definitions from several different points of view of organizational innovation as an essential factor in the success of organizations and achieving competitive advantage to reach a strong economy at the community level. All business organizations today face an environment characterized by rapid technological changes. Organizations need to be more innovative and creative to keep pace with these developments to remain, grow, lead and compete in this field (Al-Kaabi, 2016).

Al-Qudah et al. (2020) defined organizational innovation as introducing a new product as a good or service or innovation in the production or distribution process of this good or service. Al-Qudah et al. (2020) defined organizational innovation as the direction produced by an organization and not a specific individual. Inventions and innovations have become essential products for contemporary organizations that need to grow. Moreover, organizational innovation means dealing with the new and abandoning the old. Instead, it has come to mean applying a new idea, a new product, a new process, a new service, or a new practice (Gujarati, 2017).

## Dimensions of Organizational Innovation

Among the dimensions of organizational innovation mentioned by many studies are the following:

**Management innovation** includes the variables that occur in the organizational structure and work design, in addition to the organization's policies and strategies. This means a set of procedures, processes, and behaviors that improve the overall organizational climate and motivate workers to solve problems and make decisions in new ways that are not presented. This type is linked to the organizational structure. Moreover, the administrative process in addition to the organization's main activities (Mohamed et al., 2017).

**Product innovation** means introducing a new product or developing it and changing it radically through the techniques used and production methods to include the product's characteristics and its uses. A new product is entirely different from the existing products or an incremental innovation through which the product is modified, changed, or improved to comply with customers' requests (Abdel & Osama, 2016).

**Process innovation:** It includes the types of innovations related to changes that include developing or applying a new method of production and marketing. The goal is to increase and reduce production costs and customer satisfaction. This is done by applying new methods and equipment linked with the sequence of manufacturing operations to improve production and efficiency of production activities. The process innovation should be radical, i.e., in the work methods drastically or gradually by improving the production elements, equipment, and machines (The et al., 2021). It also includes the innovation of the marketing process related to changes in product design, and packaging,

in addition to the methods of distribution, promotion, transportation, and pricing related to the product (Al-Qaeda et al., 2020).

## Previous Studies

Study by Kusmantini et al. (2021) aimed at analyzing the impact of business intelligence on competitive advantage through knowledge sharing and organizational innovation in export firms in Yogyakarta Special Zone. The study results indicated that business intelligence impacts three other variables, namely knowledge sharing, organizational innovation, and competitive advantage, and that knowledge sharing and organizational innovation positively impact competitive advantage. In addition, knowledge sharing and organizational innovation mediate the impact of business intelligence on competitive advantage.

Hilal and Arbab's study aimed at clarifying the role of organizational innovation as an effective mechanism for finding solutions and alternatives to deal with crises facing companies and knowing the organization's capabilities in finding typical solutions that contribute to reducing the effects of crises facing the company in the presence of an environment unstable. The results showed a direct relationship between organizational innovation and increasing organizational effectiveness in crises.

Abul Fotouh et al. (2016) aimed at identifying the relationship of knowledge management and its impact on organizational innovation in Palestinian telecommunication companies. The results showed the existence of a relationship between the processes of knowledge management in organizational innovation.

Choughri, R. (2018) aimed to determine the best way to integrate business intelligence with knowledge management to influence the organizational innovation process. A review of the literature reveals that knowledge management and business integration are essential components that contribute significantly to the business culture of any organization. Previous studies on this topic also reveal that business integration and knowledge management bring innovation to business, thus making the business unique in its operations.

Study by Eidizadeh et al. (2017) aimed at demonstrating the role of business intelligence, knowledge sharing, and organizational innovation in gaining a competitive advantage. The results showed that business intelligence positively affects sharing knowledge, organizational innovation, and gaining a competitive advantage.

Abul Fotouh et al. (2016) aimed at identifying the impact of the critical success factors for business intelligence systems on accounting information systems, In addition to identifying the effectiveness of the integration between the critical success factors of business intelligence systems to benefit from them in supporting accounting information systems. The study reached a final result that there is a significant relationship between the critical success factors of business intelligence systems and accounting information system.

## Study Methodology

**Study population and sample:** The study population is represented by the companies operating at insurance sector in Jordan, which are (24) companies, according to the website of the Jordanian Federation of Insurance Companies (<http://www.joif.org/>), which employs 2874 employees. A proportional stratified random sample of employees at insurance companies in Jordan was chosen to represent the study population. On this basis, the size of the study sample

is (342) employees, according to the sampling table, the acceptable margin of error is (5%) (Al-Najjar et al., 2013).

### Validity of the Study Tool

There were twenty arbitrators to verify the validity of the content of the paragraphs of the questionnaire. The questionnaire was modified according to the notes received.

### Cronbach Alpha Test

<b>Study Variables and Dimensions</b>	<b>Cronbach Alpha</b>	<b>Number Of Paragraphs</b>
Senior management support	0.8	5
User-oriented change management	0.88	5
Team building skills	0.89	5
Project Planning	0.83	5
Integration of sustainable data quality	0.9	5
Clear vision	0.88	5
Success factors for business intelligence	0.91	30
Management innovation	0.92	5
Product innovation	0.8	5
process innovation	0.88	5
Organizational innovation	0.92	15

Cronbach's alpha coefficients were extracted (Cronbach's Alpha) to ensure the reliability of the study instrument. The results of Table 1 refer to the values of the Cronbach alpha coefficients shown in Table 1, which range between (0.80-0.92). We note that all of them are more than (0.7), indicating the study tool's stability (Sekaran & Bougie, 2016).

Table 1 shows Cronbach's alpha coefficients (Cronbach's Alpha) to test the reliability of the study tool.

### Analysis of the Answers to the Study Questions

All responses of the sample members under study were converted into degrees in preparation for finding the arithmetic mean for each field in the study in order to determine the degree of importance of the arithmetic averages of the study variables. The responses were divided into three levels, "high," "medium," and "low," by applying the following equation:

$$\text{Length of period} = \text{upper limit} - \text{lower limit} = 5 - 1 = 1.33.$$

The low significance level is from 1- less than 2.33, the medium significance level is from 2.33 to less than 3.67, and the high significance level is from 3.67 -5.

<b>Dimension</b>	<b>Mean</b>	<b>Relative importance</b>
Senior management support	4.22	High
User-oriented change management	4.28	High
Team building skills	4.38	High
Project Planning	4.37	High
Integration of sustainable data quality	4.36	High
clear vision	4.36	High

Table 2 indicates that the arithmetic mean of the team building skills dimension reached (4.38), while the arithmetic mean of the senior management support dimension was (4.22).

<b>Dimension</b>	<b>Mean</b>	<b>Relative importance</b>
management innovation	4.30	High
Product innovation	4.35	High
process innovation	4.38	High

Table 3 indicates that the arithmetic mean of the process innovation dimension reached (4.38), while the arithmetic mean of the management innovation dimension was (4.30).

Dependent Variable	Model Summary		Variance Analysis			Transaction Table				
	Model Summary		ANOVA			Coefficient				
	R	R Square	Df	F	Sig. F	Statement	B	Beta	T	Sig. T
Organizational innovation	0.795a	0.63	6/329	94	0.000b	Senior management support	0.13	0.2	##	008*
						User-oriented change management	-0.1	-0	-1	0.301
						Team building skills	0.04	0	1.2	0.231
						Project Planning	0.08	0.1	1.4	0.158
						Integration of sustainable data quality	0.09	0.1	1.6	0.102
						Clear vision	0.45	0.5	8.5	0.000*
Significant at the level of ( $\alpha \leq 0.05$ )										

Through the results in Table 4, we note that the success factors of business intelligence have a statistically significant impact on organizational innovation, as the value of the calculated F (94.014) is more significant than its tabular and equal value (2.09), which is significant at a



significance level less than (0.05), which indicates the significance of the study model at a degree of freedom (6/329). The value of R<sup>2</sup> (0.632) indicates that the success factors for intelligence business explained 63.2% of the variance on organizational innovation. Through the correlation coefficient R (79.5), we note a strong relationship between the success factors of business intelligence and organizational innovation. The results also show that the "clear vision" dimension significantly affected organizational innovation, as it reached a beta value of (0.514). The calculated T value was (8.547), which is significant at a level less than (0.05), and came in second place after "Senior Management support" where the beta value was (0.197), and the calculated T value was (2.655), which is significant at a level less than (0.05) and based on the above, we reject the null hypothesis and accept the alternative hypothesis.

Dependent Variable	Model Summary	R Square	Variance Analysis			Transaction Table				
	Model Summary		ANOVA							
	R		Df	F	Sig. F	Statement	B	Beta	T	Sig. T
Management innovation	0.71	0.5	6/329	55.7	0.000b	Senior management support	0.18	0.23	2.67	0.008*
						User-oriented change management	-0.1	-0.1	-0.89	0.374
						Team building skills	-0	-0	-0.08	0.941
						Project Planning	0.05	0.05	0.67	0.506
						Sustainable Data Quality Integration	0.15	0.15	1.52	0.149
						clear vision	0.43	0.42	6.02	.000*
* Significant at the level of ( $\alpha \leq 0.05$ )										

Through the results in Table 5, we note that the success factors of business intelligence have a statistically significant effect on management innovation, as the value of the calculated F (55.668) is more significant than its tabular and equal value (2.09), which is significant at a significance level less than (0.05), which indicates the significance of the study model at a degree of freedom (6/329). The value of R<sup>2</sup> (0.504) indicates that the success factors for intelligence business explained 50.4% of the variance in management innovation. Through the

correlation coefficient R (71.1), we note a strong relationship between the success factors of business intelligence and management innovation.

Dependent variable	Model Summary		Variance analysis			Transaction table				
	Model Summary		ANOVA			Coefficient				
	R	R Square	Df	F	Sig. F	Statement	B	Beta	T	Sig. T
Product innovation	0.7	0.6	6/329	72	0.000b	Senior management support	0	0.177	2.2	*0.028
						User-oriented change management	-0	-0.09	-1	0.3
						Team building skills	0	0.082	1.9	0.1
						Project Planning	0	0.158	2.3	0.021*
						Sustainable Data Quality Integration	0	0.055	0.8	0.4
						Clear vision	0	0.467	7.2	0.000*

\*significant at the level of ( $\alpha \leq 0.05$ )

Through the results in Table 6, we note that the success factors of business intelligence have a statistically significant effect on product innovation, as the value of the calculated F (72.378) is more significant than its tabular and equal value (2.09), which is significant at a significance level less than (0.05), which indicates the significance of the study model at a degree of freedom (6/329). The value of R<sup>2</sup> (0.569) indicates that the success factors for intelligence business explained 56.9% of the variance in product innovation, and through the correlation coefficient (R (75.4), we note a strong relationship between the success factors of business intelligence and product innovation.

The results also show that the dimension of "clear vision" significantly affected product innovation, as the beta value reached (0.467). The value of the calculated T (7.178), which is significant at a level less than (0.05), came in second place after "project planning," where the beta value was (0.158). The calculated T value was (2.320), significant at less than (0.05). ), and came in third place after "Support of Senior Management," where the beta value was (0.177), and the calculated T value was (2.200), which is significant at a level less than (0.05). Based on the above, we reject the null hypothesis and accept the alternative hypothesis that states: There is a statistically significant effect at a significant level ( $\alpha \leq 0.05$ ) for the success factors of business intelligence in terms of its dimensions (senior management support, user-oriented change management, team building skills, project planning, sustainable data quality integration, clear vision) on product innovation at insurance companies in Jordan (Aboul, F & Samir, 2018).

Dependent variable	Model Summary		Variance analysis			Transaction table				
	R	R Square	Df	F	Sig. F	Statement	B	Beta	T	Sig. T
Process innovation	0.704	0.5	6/329	53.8	0.000b	Senior management support	0.1	0.123	1.416	0.2
						User-oriented change management	-0	0.041	-0.48	0.6
						Team building skills	0	0.053	1.158	0.2
						Project Planning	0	0.035	0.473	0.6
						Sustainable Data Quality Integration	0.1	0.083	1.08	0.3
						Clear vision	0.5	0.519	7.37	0.000*

\*significant at the level of ( $\alpha \leq 0.05$ )

Through the results in Table 7, we note that the success factors of business intelligence have a statistically significant effect on process innovation, as the value of the calculated F (53.83) is more significant than its tabular and equal value (2.09), which is significant at a significance level less than (0.05), which indicates the significance of the study model at a degree of freedom (6/329). The value of (R<sup>2</sup> 0.495) indicates that the success factors for intelligence business explained 49.5% of the variance on process innovation. Through the correlation coefficient (R) (70.4), we note a strong relationship between the success factors of business intelligence and process innovation.

The results also show that the dimension of "*clear vision*" had the most significant impact on process innovation, as the beta value reached (0.519), and the value of calculated T (7.370), and it is significant at a level less than (0.05). Top management support, user-oriented change management, team building skills, project planning, sustainable data quality integration, clear vision) on process innovation at insurance companies in Jordan.

## FINDINGS AND RECOMMENDATIONS

### Results

The results showed that there is a statistically significant impact of success factors for business intelligence in terms of its dimensions (top management support, user-oriented change management, team-building skills, project planning, sustainable data quality integration, clear vision) on organizational innovation at Insurance companies in Jordan. Moreover, the success factors for business intelligence explained 63.6% of the variance on organizational innovation.

The results showed a statistically significant impact of the success factors for business intelligence in terms of its dimensions (support for senior management, user-oriented change management, team building skills,

project planning, integration of sustainable data quality, and clear vision) on management innovation at insurance companies in Jordan. The success factors for business intelligence explained 51.1% of the variance on management innovation.

The results showed that there is a statistically significant impact of the success factors for business intelligence in terms of its dimensions (top management support, user-oriented change management, team building skills, project planning, integration of sustainable data quality, clear vision) on product innovation at insurance companies in Jordan. , where the correlation coefficient ( $R=0.757$ ) indicates that there is a statistically significant correlation between the independent variables combined (top management support, user-oriented change management, team building skills, project planning, sustainable data quality integration, clear vision) and the dependent variable (product innovation). Moreover, the success factors for business intelligence explained 57.3% of the variance on product innovation.

The results indicated that there is a statistically significant impact of the success factors for business intelligence in terms of its dimensions (top management support, user-oriented change management, team building skills, project planning, sustainable data quality integration, clear vision) on process innovation at insurance companies in Jordan. where the correlation coefficient ( $R=0.699$ ) indicates that there is a statistically significant correlation between the independent variables combined (top management support, user-oriented change management, team building skills, project planning, sustainable data quality integration, clear vision) and the dependent variable (process innovation) and it appeared The value of the coefficient of determination ( $R^2 = 0.488$ ), which indicates that the success factors for business intelligence in terms of its dimensions (top management support, user-oriented change management, team building skills, project planning, sustainable data quality integration, clear vision) was interpreted by 48.8% from the variance on process innovation.

The results indicated the high relative importance of the success factors for business intelligence at insurance companies in Jordan, and this indicates the insurance companies' interest in the success factors, and this stems from the awareness of those companies of the importance of these factors in developing their work, improving their performance and maintaining the continuity of their role In economic development and avoiding underperformance, this was confirmed by the study of Majeed 2019 and (Eidzadeh et al. 2017).

The results showed that there is a high level of user-oriented change management, team building skills, project planning, integration of sustainable data quality, and clear vision at insurance companies in Jordan, and a high level of the relative importance of organizational innovation in the surveyed companies.

The study concluded that there is a statistically significant impact of success factors for business intelligence in terms of its dimensions (senior management support, user-oriented change management, team building skills, project planning, sustainable data quality integration, clear vision) on organizational innovation in terms of its combined dimensions (management innovation, product innovation, innovation operations) at insurance companies in Jordan. It indicates the role and impact of success factors in presenting an idea or action that would make a fundamental improvement for insurance companies and add value directly or indirectly to the company, and what was confirmed by previous studies such as the study of Abul Fotouh et al., (2016). He stresses the importance of balancing the economic vision to accurately achieve the needs and goals of the company because, in the end, it will affect the outcome of business intelligence systems (Yang et al., 2022).

The results indicated that there is a statistically significant impact of business intelligence success factors in terms of their dimensions (top management support, user-oriented change management, team building skills, project planning, integration of sustainable data quality, clear vision) on management innovation at insurance companies; This means the impact of success factors on interactive relationships to accomplish tasks, work goals, and provide rules and procedures that work with communication and exchange between employees and the environment surrounding insurance companies in Jordan. It was also found that the dimension of "clear vision" had the most significant impact on management innovation, in contrast to the study of Chaudhry & Dhingra (2021), which showed that management support and alignment of business goals are the most critical factors driving the implementation of business intelligence.

The study concluded that there is a statistically significant impact of success factors for business intelligence in terms of its dimensions (top management support, user-oriented change management, team building skills, project planning, sustainable data quality integration, clear vision) on product innovation in insurance companies, and that the "clear vision" dimension has an impact most prominent in product

innovation; This means introducing new products (goods or services) or developing services and radically changing them through the technologies used by insurance companies in Jordan.

The results indicated that there is a statistically significant impact of the success factors for business intelligence in terms of its dimensions (top management support, user-oriented change management, team building skills, project planning, sustainable data quality integration, clear vision) on process innovation in insurance companies, and that the dimension of "clear vision" has an impact. The biggest on process innovation. It indicates increased quality, reduced costs, service delivery, and customer satisfaction.

## Recommendations

### The Following Recommendations were reached

Increasing awareness among all sectors of the importance of success factors for business intelligence that make them keep pace with recent developments in various fields to enhance organizational innovation.

As a result of the changes and challenges experienced by the business environment, it is imperative that companies develop a methodology for managing their projects and that the company's information is ready for use.

The respondents should pay attention to the dimensions of success factors for business intelligence and what is related to them due to their impact on the company's employees and the increase of the company's ability to innovate.

The study suggests that future studies be expanded and deal with other dimensions of success factors with diversity in the environment and the sample, as well as addressing the study variables with other variables and other sectors

## REFERENCES

- Abdel, A., & Osama, M. (2016). The impact of organizational change on innovation in business organizations. *Scientific journal of economics and trade*, (6) 4,497-521.
- Aboul, F., Samir. (2018). Integration between the tools of business intelligence systems and the post-budgeting approach as a starting point for improving performance management systems. *The Egyptian Journal of Business Studies*, (3) 42,204-229.
- Abu K., Ibrahim, M., & Rifai, Mamdouh A. (2015). The impact of knowledge on organizational innovation: an applied study on the Palestinian telecommunications sector. *Scientific Journal of Economics and Trade*, 4(12), 13 – 28.
- Abu, N. (2020). The mediating role of the competencies of business intelligence systems in the relationship between organizational immunity and the success of financial decisions "An applied study on food industries companies in the Gaza Strip. *Journal of Economic and Administrative Sciences*, 22 (1),1-27.
- Abul Fotouh, Saleh, & Hussein, Bassem Muhammad (2016). The role of critical success factors in business intelligence systems in supporting accounting information systems for internal purposes: a field study, *The Egyptian Journal of Business Studies*,40(2), 399-423.
- Al-hawajreh, K. (2018). The Mediating Role of Business Intelligence Capabilities between Organizational Entrepreneurship and Strategic Success at Jordanian Governmental Universities.
- Al-Kaabi, H.S. (2016). The Role of Administrative Empowerment in Promoting Organizational Innovation. *Al-Muthanna Journal of Administrative and Economic Sciences*, 6(1), 24-40.
- Al-Najjar, F., Al-Najjar, N., & Al-Zoubi, M. R. (2013). Scientific research methods: Applied perspective. *Dar Al-Hamid for Publishing and Distribution, Amman, Jordan*.
- Al-Qudah, Fadi H., Al-Shawabkeh, Ziyad Ali, & Al-Nusour, Bilal H. (2020). The impact of the characteristics of the smart organization in promoting innovation: an applied study on the ict sector in Jordan. *Mithqal Journal of Economic and Administrative Sciences*, 6 (11), 183-213.
- Aminova, M., & Marchi, E. (2021). The role of innovation on start-up failure vs. its success. *International Journal of Business Ethics and Governance*, 4(1), 41-72.
- Bader, B.A. (2017). Organizational Readiness Toward Business Intelligence Implementation Case Study: Ministry of Education & Higher Education–Gaza.

- Chang, W.J., Hu, D. C., & Keliw, P. (2021). Organizational culture, organizational citizenship behavior, knowledge sharing and innovation: a study of indigenous people production organizations. *Journal of Knowledge Management*, 25(9), 2274-2292.
- Chaudhry, K., & Dhingra, S. (2021). Modeling the Critical Success Factors for Business Intelligence Implementation: An ISM Approach. *International Journal of Business Intelligence Research (IJBIR)*, 12(2), 1-21.
- Choughri, R. (2018). Integrating business intelligence and knowledge management to influence organizational innovation process business analytics importance and implementation view project risk management view project integrating business intelligence and knowledge management. 20(6), 82–86.
- Eidizadeh, R., Salehzadeh, R., & Esfahani, A. C. (2017). Analysing the role of business intelligence, knowledge sharing and organisational innovation on gaining competitive advantage. *Journal of Workplace Learning*, 29(4), 250-267.
- Gujarati, DN. (2017). *Basic Econometric*, 5th edition, McGraw-Hill Education.
- Jahantigh, F. F., Habibi, A., & Sarafrazi, A. (2019). A conceptual framework for business intelligence critical success factors. *International Journal of Business Information Systems*, 30(1), 109-123.
- Kasemsap, K. (2018). Multifaceted applications of data mining, business intelligence, and knowledge management. *Intelligent Systems: Concepts, Methodologies, Tools, and Applications*, 810-825.
- Kusmantini, T., Mardiana, T., & Pramudita, R. (2021). Analysis of the Effect of Business Intelligence on Competitive Advantage through Knowledge Sharing and Organizational Innovation in Export Companies. *Journal of Economics and Business*, 4(1).
- Mohamed, H., Ahmed, Abdel-Rahman Ali, Sayed, Esmat Mohamed, & El-Sayed, Adel H. (2017). The relationship of organizational support with creativity and administrative innovation in the Egyptian Basketball Federation. *Assiut Journal of Physical Education Sciences and Arts*, 45(3),47-70.
- Richards, G., Yeoh, W., Chong, A. Y. L., & Popovič, A. (2019). Business intelligence effectiveness and corporate performance management: an empirical analysis. *Journal of Computer Information Systems*, 59(2), 188-196.
- Rostami, N.A. (2014). Integration of Business Intelligence and Knowledge Management–A literature review. *Journal of Intelligence Studies in Business*, 4(2).
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & sons.
- Teh, J.S., Teoh, Y.H., How, H.G., & Sher, F. (2021). Thermal analysis technologies for biomass feedstocks: a state-of-the-art review. *Processes*, 9(9), 1610.
- Yang, M., Sulaiman, R., Yin, Y., Mallamaci, V., & Alrabaiah, H. (2022). The effect of business intelligence, organizational learning and innovation on the financial performance of innovative companies located in Science Park. *Information Processing & Management*, 59(2), 102852.

**Received:** 13-Oct-2022, Manuscript No. JMIDS-22- 12676; **Editor assigned:** 16-Oct-2022, Pre QC No. JMIDS-22- 12676 (PQ); **Reviewed:** 11-Dec-2022, QC No. JMIDS-22- 12676; **Revised:** 15-Dec-2022, Manuscript No. JMIDS-22-12676(R); **Published:** 22-Dec-2022