

أثر ريادة الأعمال المستدامة على التنمية المستدامة: الدور المُحسِّن للابتكار الأخضر  
في شركات الخدمات في فلسطين

**Impact of Sustainable Entrepreneurship on Sustainable  
Development: The Moderating Role of Green Innovation in  
Service companies in Palestine**

ميس عواد، طالبة باحثة/ تخصص إدارة أعمال، الجامعة العربية الأمريكية-جنين، فلسطين

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## أثر ريادة الأعمال المستدامة على التنمية المستدامة: الدور المُحسِّن للابتكار الأخضر في شركات الخدمات في فلسطين

### الملخص:

تهدف هذه الورقة البحثية إلى فهم أثر ريادة الأعمال المستدامة على التنمية المستدامة من خلال الدور المُعدل للابتكار الأخضر في شركات الخدمات في فلسطين. وقد تم استخدام المنهج الوصفي التحليلي لتحقيق أهداف الدراسة والإجابة على أسئلتها. وتكوّن مجتمع الدراسة من جميع العاملين الإداريين في شركات الخدمات في فلسطين. وتم استخدام برنامج الحزمة الإحصائية للعلوم الاجتماعية لفحص البيانات بعد الحصول عليها باستخدام الاستبيان (SPSS). وتوضح الورقة البحثية وجود أثر ذي دلالة إحصائية عند مستوى الدلالة ( $\alpha \leq 0.05$ ) لريادة الأعمال المستدامة على التنمية المستدامة في شركات الخدمات في فلسطين من خلال الأثر المُعدل للابتكار الأخضر، "وهنا يأتي دور ريادة الأعمال، التي تُعد أداة رئيسية للتنمية المستدامة. كما يُعد نمو ريادة الأعمال عاملاً مهماً في تحقيق وتحفيز التنمية المستدامة، ولذلك أصبح من الضروري على رواد الأعمال تحقيق نمو مستدام وتأمين مستقبل لريادة الأعمال بما يحمي البيئة في المشاريع الريادية، وتأتي خصوصية الدراسة في عرضها لنظرية متطورة تتعلق بوظيفة ريادة الأعمال المستدامة في التنمية المستدامة. يشير النموذج الموضح هنا إلى كيفية الاستفادة من الابتكار الأخضر لمعالجة مجموعة متنوعة من المشكلات الاجتماعية والاقتصادية والبيئية.

**الكلمات المفتاحية:** ريادة الأعمال المستدامة، التنمية المستدامة، الابتكار الأخضر، فلسطين.

### Abstract:

"This paper aims to understand the impact of sustainable entrepreneurship on sustainable development through the moderating role of green innovation in Service companies in Palestine. The descriptive and analytical approach was used in order to achieve the objectives of the study and answer its questions. The study population consisted of all administrative workers in the service companies in Palestine. The statistical package for social sciences program was used to examine the data after obtaining it using the questionnaire (SPSS). The paper shows that there is a statistically significant effect at the level ( $\alpha \leq 0.05$ ) of Sustainable entrepreneurship on sustainable development in the service companies in Palestine through the moderating impact of green innovation, "Here comes the role of entrepreneurship, which is a key tool for sustainable development. The growth of entrepreneurship also is an important factor in achieving and stimulating sustainable development, and it has thus become imperative for entrepreneurs to achieve sustainable growth and secure a future for entrepreneurship in a manner that protects the environment in entrepreneurial projects, The study's distinctiveness comes in its presentation of a cutting-edge theory regarding the function of sustainable entrepreneurship in sustainable development. The model shown here indicates how green innovation can be utilized to address a variety of social, economic, and environmental problems."

**Keywords:** Sustainable Entrepreneurship, Sustainable Development, Green Innovation, Palestine.

## Introduction

In recent years, organizations have achieved advantages to compete with each other as a result of the continuous change in the environment around them, and agility is one of the most efficient features in competitive environments (Yusuf et al., 2022). Therefore, the center of attention has become towards dividing the institutions into two types of institutions: the lean and traditional institutions. Agility represents a combination of many features represented in the features of flexibility, speed, and compatibility, and the organization that is distinguished by these features has become called the agile organization (Al-Anzi, 2018).

Institutions carry out their activities and tasks in light of the continuous change resulting from instability and stability in their environment, and they try to confront this by possessing a set of capabilities and resources that make them adapt to that change, instability and stability in order to maintain their existence, survival, growth and achievement of their goals (AlTaweel & Al-Hawary, 2021). One of the means by which organizations can survive and thrive in a constantly changing environment is; Agility inside the organization is something they require. In the context of the abrupt and unexpected changes that institutions encounter on a daily basis, agility is one of the contemporary concepts in administrative philosophy. It refers to the easiest and fastest way to move. In order to be able to effectively react to unexpected developments, businesses must operate in a way that is defined by simplicity, speed, and flexibility (Al-Hunaiti, 2018).

The occurrence of many changes and the terrible acceleration in discoveries and their applications and technological progress, and the obsolescence of human skills, methods and administrative systems at a tremendous speed (Ranjan & Foropon, 2021). In addition to the existence of the phenomenon of the loss of stability of economic systems, it has been reflected in the lives of organizations, and they are now living a new life in which knowledge, ideas, values, culture, systems, and even the nature of these institutions change (Chen, Y., & Lin, 2021). This led to changes in the work environment and the behavior of employees, which necessarily led to the adoption of relatively new concepts in contemporary administrative thought, including business intelligence. It is an umbrella covering a wide range of skills and aptitudes that fall outside the scope of conventional intelligence capabilities.

Hence, this study comes to find out the impact of organizational agility in improving institutional performance, with the moderating role of business intelligence in the Palestinian higher education institutions. These institutions are considered important institutions, which made them play a pivotal and essential role in advancing development in Palestine.

## Review of Literature

### Organizational Agility

The concept of organizational agility has evolved as a method that helps raise the level of organizational performance in order for agile companies to achieve their strategic goals and competitive advantages, which are among the most effective features in changing work environments. It is necessary to find mechanisms for organizational agility in order to reduce or limit waste (Al-Anzi, 2018). The term agility appeared in management science as one of the new management methods in production and manufacturing at the beginning of the twentieth century, specifically in 1991 through research work sponsored by the United States government at the Yococca Research Institute at Lehigh University. The use of this term was expanded by the management scientist Peter Drucker, and after that this term brought the attention and interest of many researchers and experts in the science of management, as they rushed to explain it, define its concept and define its dimensions.

Organizational agility is one of the most important characteristics of an organization that supports its resistance to market turbulence (Vasanthan & Suresh, 2022). This is because it is an administrative ability that allows the organization to make changes in a timely manner when circumstances require it in order to avoid problems in the future and to be able to deal with current problems (Rafi et al., 2022). Therefore, agility was considered one of the most important features that reflect organizational efficiency in the competitive environment, and it became the center of attention. Accordingly, organizations were divided into two types: the agile type of organization and the traditional type of organization (Saha et al., 2017).

Organizational agility is also considered one of the most important means on which contemporary organizations depend, which are now operating in an unstable environment characterized by a great degree of complexity due to developments in the environment such as rapid progress in technologies and means of communication, political changes, and other changes that affect the performance of organizations and the openness of markets (Walter, 2021). This is why organizational agility is required.

Baraei & Mizaei (2018) believe that organizational agility is the company's ability to respond quickly to changing market conditions and customer needs, as customer and worker satisfaction is among the company's agile goals, and job satisfaction facilitates commitments and employee capabilities achieve greater productivity.

(Maghawry & Al-Dabbagh, 2016), (Al-Shammari & Al-Ziyadi, 2018), (Al-Basal, 2019) referred to the dimensions of organizational agility, which are as follows:

### 1. Sensing agility

Sensing means the company's ability to identify the factors of change occurring in the work environment, whether internal or external (Walter, 2021). In addition to anticipating the changes that may occur in the future and preparing for them by developing strong visions, plans and strategies to confront them, constantly developing their performance and creating new work methods that contribute to achieving the company's goals effectively (Shakhour et al., 2021). This makes institutions able to continue their efforts for long periods, and maintain focus in performing work during difficult times to achieve the desired success (Maghawry & Dabbagh, 2016).

### 2. The agility of the decision-making process

It is the capacity to gather, compile, organize, and assess pertinent information from a range of sources, including the ability to quickly interpret the effects of business events, identify opportunities and threats based on interpretation of events, and develop action plans that direct how to reorganize resources and carry out new competitive actions (Al-Shammari & Al-Zayadi 2018). The decision-making task entails a number of interconnected activities that interpret a number of distinct events, identify opportunities and threats, and gather, accumulate, structure, and evaluate businesses and related information from a number of sources to comprehend the effects of the events on their actions (Mohammad & Ahmadzadeh, 2017).

### 3. The agility of the practiced application

It is the capacity to swiftly launch new goods and services as well as new pricing models onto the market. It is the capacity to dynamically and radically reconfigure organizational resources, alter procedures, reorganize supply-changing relationships according on actual plans. In order to meet environmental change, the job of practice entails a series of actions to realign organizational resources and alter business procedures based on the business principles that emerge from the decision-making task (Al-Bassal, 2019).

### Institutional Performance

The term "institutional performance" is used to describe previous, ongoing, and upcoming activities. Other definitions of performance include a task that has been completed, an ongoing situation, or steps taken to prepare for upcoming expectations. For instance, even if profitability is not a true measure of success, it is occasionally regarded as the gold standard (Altanashat et al., 2019). Cycle time, productivity, waste reduction, and regulatory compliance are examples of common or mandated metrics that are used to assess a company's effectiveness, efficiency, and environmental responsibility. According to Meresa (2019), performance also includes measures that assess how well a given request

is handled as well as the act of performing, successfully completing a task, or applying knowledge rather than simply knowing it.

The performance received exceptional attention because it reflects the right strategic direction of the institutions, and an actual and realistic test of the credibility of the approved strategic approach (Anwar & Abdullah, 2021). Accordingly, performance is the result of different strategic processes and stages. Therefore, any defect or failure in any of these processes or stages must be reflected or indicated by the strategic performance, which is the mirror of strategic management and therefore is the essence of strategic management (Ramadani et al., 2019).

#### Business Intelligence

According to the definition of the phrase "business intelligence," it refers to a group of technologies that enable the processing, assessment, and display of data for the purposes of comprehension, investigation, and decision-making (Niu et al., 2021). Alternatively, it is described as "a set of computerized solutions that allow the analysis of company data in order to extract new qualitative information on which decisions are based, whether they be tactical or strategic" (Ain et al., 2019). The definition of business intelligence is "a set of means, tools, and methods that support the process of collecting, compiling, modeling, analyzing, and extracting information (Kolukuluri et al., 2023)."

According to Obidat et al. (2023), business intelligence (BI) is a collection of tools and methods that assist in converting a sizable amount of data from various sources into valuable information to support decision-making. Business intelligence tools have become a significant driver for improving organizational performance and the decision-support environment over the past ten years. Business intelligence technologies have increased decision-making efficacy at several levels and across a variety of domains (Khrisat et al., 2023).

By employing these clever techniques, business intelligence attempts to lessen obstacles and psychological pressures when carrying out difficult and dangerous work or that requires complex details and requires more mental focus, continuous mental presence, and strict decisions that cannot tolerate delay or error (Mikalef et al., 2019). Business intelligence also helps people avoid boredom and routine by simulating human thought and behavior, generating fresh ideas that foster innovation and creativity, and offering more than one copy of the system to take the place of experts. Along with not putting too much reliance on people with extensive technical expertise and experience, Saleh et al. (2017) recommend that activities be completed quickly and accurately.

It can be seen in business intelligence's capacity to solve current issues, engage in mental processes like perception and thought, learn from and apply prior experiences and expertise, acquire

knowledge, store it, and use it. It can also be seen in business intelligence's ability to take advantage of the principle of trial and error to discover various topics, react quickly to new situations and developments, and deal seriously and rigorously with challenging cases (Ain et al., 2019). Differentiating between the relative importance of the components of existing cases, dealing with ambiguous situations in light of a lack of information, innovation, understanding and comprehending visible matters, and presenting the good information necessary to make the appropriate decisions are other examples of what must be done (Al-Zubi, 2016).

#### Hypotheses Development

According to Menon & Suresh (2020), organizational resilience is characterized by the flexibility and ease with which an organization restructures and adjusts its practices and operations when faced with unprecedented changes in its environment. An agility assessment would help the organization to understand its current situation. Results of Baninam & Amirnejad (2017) confirmed that organizational agility and each of its components have meaningful effects on organizational performance and knowledge management. Strategic agility is seen as a vital requirement for firms to attain outstanding organizational performance, according to Lyn Chan & Muthuveloo (2021). Strategic agility is really a key component of the envisioned connections, according to data analysis. Additionally, it is known that people, organizational skills, and technologies all contribute significantly to strategic agility. This study stresses that in order to achieve outstanding organizational performance for long-term commercial sustainability, private HEIs fundamentally need strategic agility.

According to the above, the following hypothesis was reached:

H1: "There is a statistically significant effect at the level ( $\alpha \leq 0.05$ ) of organizational agility on institutional performance in Palestinian higher education institutions."

H1.1: "There is a statistically significant effect at the level ( $\alpha \leq 0.05$ ) of sensor agility on institutional performance in Palestinian higher education institutions."

H1.2: "There is a statistically significant effect at level ( $\alpha \leq 0.05$ ) of the agility of the decision-making process on institutional performance in Palestinian higher education institutions."

H1.3: "There is a statistically significant effect at the level ( $\alpha \leq 0.05$ ) of the agility of the practiced application on the institutional performance in the Palestinian higher education institutions."

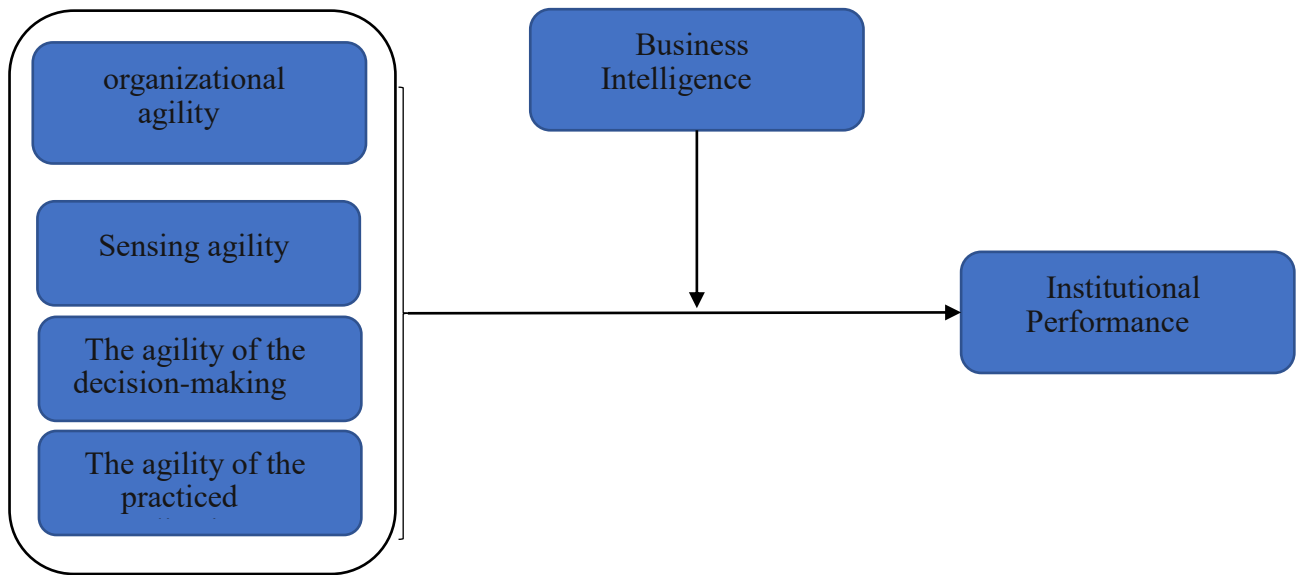


Figure (1): Theoretical framework

“Menon & Suresh (2021) identified eight enablers that can promote agility in higher education. The ability to sense the environment, organizational structure, adoption of ICT, organizational learning, human resource strategies, leadership, readiness to change and collaboration with the stakeholders were the eight factors identified. According to Hayan Hamdan (2021), the relationship between business intelligence and organizational agility can conclude the following results: The first sub-hypothesis results indicate a significant effect and a medium and direct correlation between the independent variable business intelligence and the dependent variable sensor agility at the university under study. The second sub-hypothesis results indicate a significant effect and a strong and direct correlation between the independent variable business intelligence and the dependent variable decision-making agility at the university under study. The results of the third sub-hypothesis indicate a significant effect and a medium and direct correlation between the independent variable business intelligence and the dependent variable, the agility of application in the university under study. The fourth hypothesis results indicate a significant effect and a strong and direct correlation between the independent variable business intelligence and the dependent variable organizational agility at the university under study. Cheng et al. (2020) conclude that business intelligence has a significant influence on the speed of internationalization, and the organizational agility positively mediates such causal relationship.”

According to the above, the following hypothesis was reached:



H2: There is a statistically significant effect at the level ( $\alpha \leq 0.05$ ) of organizational agility (Sensing agility, the agility of the decision-making process, the agility of the practiced application) in improving institutional performance in the presence of the moderating role of business intelligence in Palestinian higher education institutions.

### Research Methodology

The study's goals and questions were met by employing a descriptive and analytical technique. With the aid of a suitable tool for data and information collection, the descriptive technique was employed based on the study of the research topic. Using the analytical technique to process and evaluate the data gathered, test hypotheses, and arrive at the study's findings, the objective of the study is to investigate the link between the study's dimensions and its variables. Also, offer sensible suggestions in light of those findings.

The study population consists of all workers in the Palestinian higher education institution, where the population is referred to as the group to which the researcher wishes to generalize the results of the study, and includes all persons with specific characteristics (Fraenkel et al. 2018). The data was collected through a random sample of workers in the Palestinian Higher Education Institution, estimated at 250 male and female employees. A questionnaire specially developed to suit the current research was used as a study tool. It was distributed electronically through Google Forms, where 186 questionnaires (74.4%) were retrieved from the total study sample. The statistical package for the social sciences program was used to examine the data after obtaining it using the questionnaire (SPSS).

Through the demographic analysis of the study sample, it was found that most of the workers in the Palestinian Higher Education Institution are females, and in the most common category are young people (from 30 to 40 years old) who have a university degree to a bachelor's level. They have average years of experience, and this indicates that the respondents have the knowledge and experience necessary to answer the questionnaire and achieve the objective study.

### Result and analysis

#### - Reliability

The degree to which measures are error-free and produce consistent findings is the concept of reliability, according to Zikmund (2003, p. 300). The coefficient known as Cronbach's alpha is used to evaluate an item's internal consistency or reliability. It demonstrates how closely linked and bias-free an item is (Sekaran & Bougie, 2016). If the overall Cronbach's alpha score is more than 70%, reliability is assumed. Reliability is indicated by Cronbach's Alpha coefficients for all variables that are greater than 70%, as shown in Table 1 (Tavakol and Dennick, 2011).

Table (1) Cronbach's Alpha coefficient

No.	Variable	Cronbach's Alpha
1	Sensing agility	0.931
2	The agility of the decision-making process	0.923
3	The agility of the practiced application	0.934
5	Organizational agility	0.908
6	Institutional Performance	0.922
γ	Business Intelligence	0.931

- Correlation between Variables

The associations between the independent variable and the dependent dimensions were examined using the bivariate Pearson correlation coefficient. With a  $r$  range between 0.567 and 0.698, Table (2) demonstrates the significant correlations between dependent dimensions.

Table (2) Bivariate Pearson's Correlation ( $r$ )

No.		1	2	3	4
1	Sensing agility	1.000			
2	The agility of the decision-making process	0.698	1.000		
3	The agility of the practiced application	0.567	0.652	1.000	
4	Business Intelligence	0.607	0.693	0.598	1.000

- Multi-collinearity:

" Using the Variance Inflation Factor (VIF) and the Tolerance Variant Statistics, we check that the independent variables dimensions indicate no multicollinearity. the tolerance coefficient was lower than (3), higher than (0.05), and all three values of VIF were less than (10). Based on Hair et al., (2017), these values suggest that there is no multi-collinearity among all dimensions, demonstrating that multiple regression analysis can be used to test study hypotheses."

Table No. (3): Tolerance and VIF

Dimension	"Collinearity – Statistics"	
	Tolerance	"VIF"
Sensing agility	0.472	2.118
The agility of the decision-making process	0.360	2.776
The agility of the practiced application	0.522	1.917

Business Intelligence	0.465	2.152
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- The First Hypothesis

To test the First hypothesis, multiple linear regression analysis was performed.

The First hypothesis of the study was as follows: "There is a statistically significant effect at the level ( $\alpha \leq 0.05$ ) of organizational agility on institutional performance in Palestinian higher education institutions".

Table (4): Results of Testing the Impact First hypothesis

D.V	Model Summery		ANOVA		Coefficients				
	R	R <sup>2</sup>	F	Sig F*	variable	B	standard error	T	Sig T*
Institutional Performance	0.800	0.641	111.741	0.000	Sensing agility	0.301	0.064	4.665	0.000
					The agility of the decision-making process	0.291	0.056	5.227	0.000
					The agility of the practiced application	0.253	0.055	4.581	0.000

"\*The effect is statistically significant at the level ( $\alpha \leq 0.05$ )"

The correlation coefficient indicates that there is an effect of organizational agility on Institutional Performance in Palestinian higher education institutions methods ( $R = 0.800$ ), and that the effect of the independent variable (of organizational agility) on Institutional Performance is statistically significant according to Table No. (4) where the calculated value was F (11.741) and the level of significance (sig = 0.000) is less than (0.05), where the value of the coefficient of determination ( $R^2 = 0.641$ ) indicates that the variance in quantitative methods can explain (64.1%) of the difference in (Institutional Performance).

Table (4) lists the values of the regression coefficients for the organizational agility variable's sub-dimensions. From the table, it is obvious that the B value for the Sensing agility dimension was 0.301 and that the calculated T value for this dimension was (4.665) at a significant level (0.000). At the significance level (0.05), it is less than 0.05, indicating a significant positive effect. The table clearly

shows that the value of B in the variable "decision-making agility" was (0.291), and the value of T estimated in this variable (5.227) at a significance level (0.000), that is, less than 0.05, which indicates a substantial positive effect at (0.05). The table clearly shows that the T value was (4.581) at a significance level of (0.000), less than 0.05, and the B value was (0.306) in the agility of the practiced application dimension, both of which suggest a substantial positive effect. at ( $\alpha \leq 0.05$ ).

To test the sub-hypotheses, simple linear regression analysis was performed.

H1.1: "There is a statistically significant effect at the level ( $\alpha \leq 0.05$ ) of sensor agility on institutional performance in Palestinian higher education institutions".

H1.2: "There is a statistically significant effect at level ( $\alpha \leq 0.05$ ) of the agility of the decision-making process on institutional performance in Palestinian higher education institutions".

H1.3: "There is a statistically significant effect at the level ( $\alpha \leq 0.05$ ) of the agility of the practiced application on the institutional performance in Palestinian higher education institutions".

Table (5): Impact test results H1.1, H1.2, and H1.3

I.V	Model Summery		ANOVA		Coefficients			
	R	R <sup>2</sup>	F	Sig F*	B	standard error	T	Sig T*
Sensing agility	0.691	0.478	174.031	0.000	0.715	0.056	13.192	0.000
The agility of the decision-making process	0.733	0.538	220.962	0.000	0.603	0.041	14.865	0.000
The agility of the practiced application	0.666	0.443	151.382	0.000	0.625	0.051	12.304	0.000

\*The effect is statistically significant at the level ( $\alpha \leq 0.05$ )

According to Table (5), "there is a positive association between the dimensions of "Sensing Agility" and "Institutional Performance," with the R-value of the first dimension being (0.691). When all other variables are held constant, it turns out that the coefficient of determination ( $R^2 = 0.478$ ) indicates that the domain of "Sensing Agility" accounted for 47.8% of the variation in "Institutional Performance." The value of (F) attained (174.031) at the level of confidence (sig = 0.000), which supports the significance of the regression at the level of p 0.05, was also demonstrated".

The second dimension's R-value was (0.733), indicating a favorable link between the dimensions of "The agility of the decision-making process" and "Institutional Performance." When all other variables are held constant, it turns out that the coefficient of determination is ( $R^2 = 0.538$ ), which implies that the domain of (The agility of the decision-making process) domain explained 53.8% of the variation in (Institutional Performance). The value of (F) reached (220.962) at the level of confidence (sig = 0.000), which supported the importance of the regression at the level of significance (0.05).

The third dimension's R-value was (0.666), indicating a favorable link between the dimensions of institutional performance and the agility of the practiced application. It turns out that the coefficient of determination is ( $R^2 = 0.443$ ), which implies that, when all other factors are held constant, the domain of (The Agility of the Practiced Application) explains (44.3%) of the variation in (Institutional Performance). Additionally, it was demonstrated that the value of (F) reached (151.382) at the level of confidence (sig = 0.000), supporting the significance of the regression at the level of (0.05).

To test the second hypothesis, a hierarchical linear regression analysis was performed. H2: There is a statistically significant effect at the level ( $\alpha \leq 0.05$ ) of organizational agility (Sensing agility, the agility of the decision-making process, the agility of the practiced application) in improving institutional performance in the presence of the moderating role of business intelligence in Palestinian higher education institution".

**Table (٦) :Hierarchical multiple regression analysis of the modified role statement**

DV	IV	First model			second model		
		B	T	Sig*	$\beta$	T	Sig*
Institutional Performance	organizational agility	0.846	18.382	0.000	-		
	Business Intelligence × organizational agility	-			0.430	7.758	0.000
	R	0.800			0.853		
	$R^2$	0.640			0.727		
	$\Delta R^2$	0.638			0.724		
	$\Delta F$	337.901			251.675		
	Sig. $\Delta F$	0.000			0.000		

The results of the hierarchical multiple regression analysis based on two models are shown in Table (6). The first model's findings indicated that there was a positive link between organizational agility and institutional performance, with the correlation value being ( $R = 0.800$ ). A statistically

significant relationship between the Business Intelligence variable and Institutional Performance was also demonstrated by the results, with a value of ( $F = 337.901$ ) and a significance level ( $Sig = 0.000$ ), which is smaller than ( $0.05$ ).

The value of the determination coefficient was ( $R^2 = 0.640$ ), meaning that the value of ( $64\%$ ) changes in Institutional Performance results from the change in organizational agility. The impact score value was ( $B=0.846$ ), which means that an increase of one degree in the level of interest in organizational agility leads to an increase in Institutional Performance with a value of ( $0.846$ ), which indicates that organizational agility explains ( $84.6\%$ ) of the variation. In Institutional Performance.

In the second model, “the modified variable (Business Intelligence) was added to the regression model because the correlation coefficient increased to ( $R = 0.853$ ), the determination coefficient  $R^2$  increased by ( $72.7\%$ ), and the percentage change in the value of  $F$  ( $251.675$ ) and the level of significance ( $Sig = 0.000$ ), which is less than ( $0.05$ ), both indicate that the addition of the modified variable (Business Intelligence) is statistically significant”.

The calculated  $T$  value was ( $T = 7.758$ ) with a significance level ( $Sig = 0.000$ ) and the effect score value for the modified variable (Business Intelligence) was ( $0.430$ ). This confirms the significant role of the modified variable (Business Intelligence) in improving the impact of organizational agility in Institutional Performance, as the rate of interpretation of the discrepancy in Institutional Performance increased by ( $72.4\%$ ), going from ( $64\%$ ) to ( $72.7\%$ ).

#### Discussion

The Results indicates that the variance in quantitative methods can explain ( $64.1\%$ ) of the difference in (Institutional Performance). Where the (Sensing agility) domain explained ( $47.8\%$ ) of the variance in (Institutional Performance) when all other variables remain constant. The (The agility of the decision-making process) domain explained ( $53.8\%$ ) of the variance in (Institutional Performance) when all other variables remain constant. Last but not least, when all other factors remained constant, the domain of (The agility of the practiced application) explained  $44.3\%$  of the variance in (Institutional Performance). Several studies have backed up these findings. An agility assessment would aid the firm in comprehending its existing predicament, claim Menon & Suresh (2020). Whereas organizational agility and each of its constituent parts have significant effects on organizational performance, as demonstrated by the findings of Baninam & Amirnejad (2017).

The findings also show that organizational agility (Sensing agility, the agility of the decision-making process, and the agility of the practiced application) has a statistically significant impact on institution performance at the level ( $0.05$ ) when business intelligence plays a moderating role in

Palestinian higher education institutions. Given that the percentage of interpretation of the disparity in Institutional Performance increased from (64%) to (72.7%), it is clear that the changed variable (Business Intelligence) significantly improved the influence of organizational agility on Institutional Performance. Eight enablers were named by Menon & Suresh (2021) as having the potential to foster resilience in higher education. Technology for information and communication is one of the eight determinants. According to Hayan Hamdan (2021), the interaction between organizational agility and business intelligence might lead to the following outcomes: According to the findings of the first sub-hypothesis, there is a substantial association between organizational agility and the independent variable business intelligence at a medium and direct level. Business intelligence significantly affects the rate of internationalization, according to Cheng et al. (2020), and organizational agility favorably mediates this causal link.

#### Conclusion

“This study investigated the effect of organizational agility (Sensing agility, the agility of the decision-making process, and the agility of the practiced application) on improving institutional performance through the modified role of business intelligence in Palestinian higher education institutions.”

The study's significance can be seen in two ways: first, from a theoretical standpoint, it establishes a theoretical framework for the idea of organizational agility and clarifies the function of business intelligence in boosting institutional performance in Palestinian higher education institutions. This theoretical framework is based on the reality of Palestinian higher education institutions. Its significance is also due to the fact that the study variables are contemporary administrative ideas that academics in the Arab context have started to debate and investigate.

The second aspect relates to the practical importance of the study, which can be seen in the ability of leaders in Palestinian higher education institutions to benefit from the results of this study in bringing about organizational development and rates of change in higher education institutions to advance them towards globalization. In addition to urging the leaders in these institutions to conduct continuous education and development. In light of the results reached by this study and benefiting from it in the applied field, which also doubles the importance of this study, as far as the researcher knows, due to the scarcity of Palestinian studies and research related to organizational agility, especially in studies related to the concept of business intelligence.

According to the findings, the study suggests creating a regular report on the performance of the administrators of Palestinian higher education institutions, highlighting their accomplishments and highlighting their strengths and weaknesses so that administrators can grow and enhance institutional

performance in the context of this report. The implementation of plans, as well as providing feedback on the ongoing development and improvement of institutional performance through the application of the three dimensions of organizational agility (sensing – decision making – practice), should be done in addition to setting up a control and accounting system to assess the degree to which the desired goals are achieved. Information technology, whose significance can be seen in the organizational agility of Palestinian higher education institutions, is another area that warrants continued attention. This is accomplished by ongoing technological research as well as participation in workshops and seminars on information technology and its advancement.

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