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The Impact of Economic Intelligence in Improving Entrepreneurial Performance^(*)

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Abstract

This study aims to identify the impact of economic intelligence in improving entrepreneurial performance. The study population consists of all entrepreneurs and business owners across various industries and geographical locations in Kingdom of Saudia Arabia, from which a random sample of (160) members was taken. Only 152 questionnaires were retrieved, with a recovery rate of 95% of the sample, the validity and reliability of the questionnaire were calculated, and it was found that Cronbach's alpha stability coefficient is equal to 0.92. The study adopts a quantitative research design, using structured pre-coded pre-tested questionnaire. Among the most important findings of the study are: there are statistically significant differences at the level of 0.05 or less in relation to the questionnaire axes (the role of Economic Intelligence and the role of Entrepreneurial Performance in achieving economic development due to the education, and age variables). The study also suggests a number of recommendations, the most important of which are: Developing systems that provide accurate economic data to entrepreneurs and developing and integrating economic intelligence into strategic planning of the country.

Key words: Economic intelligence, Entrepreneurial performance, KSA.

Introduction:

The current global economic environment is undergoing rapid changes, forcing entrepreneurs to address complex challenges. These challenges require a combination of a deep understanding of the economic landscape and the ability to generate innovative ideas that support business continuity and growth. Economic intelligence is a strategic tool that enables entrepreneurs to collect, analyze, and effectively utilize economic information in formulating decisions and developing strategies appropriate to market changes. By leveraging economic intelligence, entrepreneurial organizations become better able to cope with market fluctuations, anticipate future opportunities, and predict potential risks, enhancing their competitiveness and sustainable performance.

Integrating Artificial Intelligence (AI) technologies enables entrepreneurs to accelerate decision-making and streamline operational processes, enhancing their competitiveness. AI-powered tools contribute to business analysis, future forecasting, and improved customer engagement, which is particularly important for startups and Small and Medium Enterprises (SMEs) (Mariani et al., 2023).

Interest in digital entrepreneurship is growing due to the rapid advancements in artificial intelligence technologies, which play a revolutionary role in shaping the entrepreneurial environment and providing innovative technology-based solutions (Siddiqui et al., 2024).

Despite growing research in the field of artificial intelligence, the psychological impact of adopting this technology on entrepreneurs and their teams remains insufficiently clear. Furthermore, studies have yet to accurately examine the extent to which AI developments impact entrepreneurs' decisions, innovation strategies, and the long-term sustainability of their projects (Dwivedi et al., 2021).

Economic intelligence is not limited to analyzing economic indicators alone. It requires a systematic approach to gathering information about competitors, market conditions, changes in the sector, and customer preferences. This body of knowledge helps entrepreneurs make informed decisions that contribute to improving resource allocation, developing marketing strategies, and enhancing financial planning. Therefore,

incorporating economic intelligence into entrepreneurial practices is an effective tool for improving performance by stimulating growth, encouraging innovation, and increasing profitability (Calof & Wright, 2008).

Problem statement:

Entrepreneurs are constantly required to make critical decisions that directly impact the viability and development of their businesses. In an increasingly complex and competitive global economy, many faces significant challenges due to a lack of access to relevant economic information, misuse of available data, or an inability to interpret economic trends and apply them to their business strategies. As a result, entrepreneurs often struggle to make informed decisions, anticipate market shifts, identify risks, and seize emerging opportunities. This lack of economic intelligence can hinder the overall performance and long-term sustainability of entrepreneurial ventures.

Although economic intelligence is increasingly important in improving business strategies, understanding its direct impact on entrepreneurial performance is limited. Many entrepreneurs are unaware of how to integrate economic intelligence into their decision-making processes or how to use it to achieve competitive advantage.

Study Questions:

The present study is guided by the following questions:

- 1- How can the role of economic intelligence in improving entrepreneurial performance be determined?
- 2- How can the contribution percentage of the entrepreneurial performance be identified?
- 3- What is the impact of using economic intelligence on entrepreneurial innovation and the development of new products, services, or business models?
- 4- What are the challenges that entrepreneurs face when using economic intelligence, and how do they overcome these challenges?

These questions lead to the exploring of the various dimensions of economic intelligence and its impact on entrepreneurship, thus, helping to provide a more comprehensive understanding of its ability to drive entrepreneurial development and improve business performance.

Objectives:**Main Objective:**

To identifying the role of economic intelligence in improving entrepreneurial performance.

Specific Objectives:

- 1- To identify the contribution percentage of the economic intelligence in improving entrepreneurial performance.
- 2- To identify the impact of economic intelligence on various dimensions of entrepreneurial performance.
- 3- Exploring ways to employ economic intelligence to enhance competitiveness and business sustainability.
- 4- To encouraging researchers to conduct more studies on the reality of the economic intelligence.

Significance of the Study:

The importance of this research stems from its ability to provide solutions on how entrepreneurs can leverage economic intelligence to improve their business performance and sustainability in the face of increasing competition. Since entrepreneurship relies on accurate data, understanding the role of economic intelligence in decision-making has become critical for entrepreneurs seeking to maintain and increase their competitiveness. This importance can be stated as follows:

- 1- This study highlights the role of economic intelligence in enhancing entrepreneurs' ability to make sound decisions based on an understanding of the market, competitors, and economic forecasts. Entrepreneurs can develop more effective business plans and strategies by allocating and optimizing resources and managing risks effectively.
- 2- This study will increase competitiveness among entrepreneurs by identifying competitive opportunities and responding quickly to market changes.
- 3- This study will highlight how the use of economic data contributes to enhancing competitive sustainability and profitability for entrepreneurs, as well as stimulating increased creativity and innovation.
- 4- This study will contribute to increased knowledge about the relationship between economic intelligence and entrepreneurial performance.

5- It will also encourage researchers to explore the practical applications of economic intelligence in entrepreneurship, which may lead to the development of training packages that promote entrepreneurship.

The importance of this study stems from that it explores the gap between economic intelligence and entrepreneurial success, and offers solutions that can have a direct impact on the way entrepreneurs operate, innovate, and compete in society's business environment.

Delimitations of the Study:

Objectivity limit: The reality of economic intelligence in improving entrepreneurial performance.

Human limit: entrepreneurs and business owners across various industries in the Kingdom of Saudi Arabia.

Time limits: Year (2024-2025).

Spatial Limits: Kingdom of Saudi Arabia.

Study terms:

Economic Intelligence:

According to research conducted by Al Shareani and Agina (2023), economic intelligence is a vital tool for small and medium enterprises in Muscat, Amman, as it contributes to improving institutional performance by applying effective information strategies.

Economic intelligence is considered one of the fundamental methods of modern management, based on monitoring environmental variables and collecting and analyzing information in a way that contributes to sound decision-making. This approach is a contributing factor in achieving desired goals and raising performance levels, especially in a highly competitive environment (Qashi & Wadia, 2015).

The importance of economic intelligence is highlighted in light of the rapid transformations witnessed by the contemporary economy, the increasing reliance on data and information generated by enterprises, as well as changes in decision-making mechanisms and the escalation of competition. The role of economic intelligence lies in enabling enterprises to protect themselves from external threats, anticipate opportunities before others, and achieve greater adaptability to new market requirements. This is achieved through the effective use of information technologies and the

transformation of data into knowledge that supports decision-makers. The importance of this concept is also evident in the transition from simply building information systems within the enterprise to employing them in analyzing reality, developing future strategies, and confronting challenges in a changing economic environment (Ezzedine, 2019).

Entrepreneurial performance:

Entrepreneurial performance refers to the results of entrepreneurial activities, which include multiple indicators such as financial returns and growth rates, in addition to non-financial elements such as innovation and market share expansion (Wiklund & Shepherd, 2005).

Dawood and Ali (2017) indicate that the leadership performance of an organization expresses its ability to plan for the future and achieve goals efficiently and effectively, through the optimal use of resources, which contributes to achieving its leadership excellence.

From the perspective of entrepreneurship and entrepreneurial leadership, entrepreneurial performance is viewed as the extent to which an organization achieves specific goals or tasks during its entrepreneurial path, and is one of the key factors that contribute to explaining entrepreneurial outcomes and enhancing the organization's overall competitive advantage (Esaa et al., 2022).

Entrepreneurial performance reflects an organization's success in achieving its entrepreneurial goals by leveraging its leadership and organizational capabilities to generate distinct competitive value. This performance is assessed through a variety of indicators, such as financial growth (such as sales and profits), non-financial aspects (such as entrepreneur satisfaction and innovation), and the efficient use of available resources (Gomezelj & Kušce, 2013).

Theoretical framework and previous studies:

The following paragraphs present the theories, concepts and notions related to the present study and a number of previous studies.

The theoretical framework:

Economic Intelligence: A Theoretical Introduction

The concept of economic intelligence is constantly evolving in recent literature. It is no longer viewed solely as an information tool, but rather as

an integrated strategic system that contributes to enhancing competitiveness and supporting more accurate and effective decision-making. Clerk (2020) notes that economic intelligence is based on a set of coordinated procedures for collecting, processing, and distributing useful information to economic actors to support their strategies, while adhering to the legal framework and ethical standards in the business environment. This highlights the ethical and regulatory dimensions of information management within organizations.

From the perspective of international institutions, the institutional capacity to monitor, collect, and analyze strategic information is a pivotal tool in supporting decision-making processes and achieving sustainable competitive advantage, as noted by United Nations Educational, Scientific and Cultural Organization (UNESCO) in collaboration with the International Forum for Economic Intelligence (IFIE) (UNESCO, IFIE, 2021). This concept highlights the vital role of economic intelligence as one of the key foundations for institutional sustainability in environments characterized by complexity and constant change.

In a similar vein, Daguzan (2022) argues that economic intelligence encompasses a range of activities such as monitoring, analyzing, protecting, and influencing economic information, with the goal of enhancing the economic sovereignty of the state or entity in question. This expansion of the concept of economic intelligence reflects the inclusion of dimensions related to information security and geopolitical aspects.

Ben Ali and Jlassi (2023) provide a modern definition that highlights the interactive relationship between economic intelligence and strategic innovation, emphasizing that it is a system that links information, knowledge, and decision-making, and is used to enhance the ability of organizations to adapt and innovate in a changing competitive environment.

It can be argued that economic intelligence is no longer limited to a mere monitoring and analysis technique. Rather, it has transformed into a strategic tool that enhances entrepreneurial thinking, contributes to improving the quality of decision-making, and enhances the overall performance of institutions, particularly in entrepreneurial environments that rely on change and innovation.

Entrepreneurial Performance: Concept and Dimensions

Entrepreneurial performance is a fundamental concept in entrepreneurship studies, given its crucial role in explaining the success or failure of entrepreneurial initiatives within organizations. As its dimensions expand, performance is no longer measured solely by financial results, but now includes non-financial indicators such as innovation, sustainable growth, and the ability to adapt to changes in the business environment.

Entrepreneurial performance is defined as the ability to achieve sustainable results for an organization through innovation, flexibility, and the efficient use of resources, which contributes to the creation of economic and social value. Researchers Gomezelj & Kušce, (2013) also pointed out that this performance is not limited to financial profits alone, but also includes the quality of entrepreneurial decisions, interaction with market opportunities, and the ability to influence the surrounding environment.

On the other hand, entrepreneurial performance is defined as the extent to which an organization achieves specific goals or missions during its entrepreneurial journey. It is a key factor in explaining entrepreneurial outcomes and enhancing the organization's overall competitive advantage (Dwivedi et al., 2022). This definition highlighted the importance of directing performance toward clear strategic objectives, especially in an unstable entrepreneurial environment.

Urban and Kujinga (2017) noted that entrepreneurial performance is influenced by several factors, including the entrepreneurial leader's capabilities, market orientation, and the extent to which information tools and institutional intelligence are utilized. This underscores the potential relationship between economic intelligence and performance outcomes in entrepreneurial environments.

The theoretical framework for studying the impact of economic intelligence on entrepreneurial performance can be established by rely on one theory or multi-theories approach that explain the relationship between information, decision quality, achieving competitive advantage, and the impact thereof on business outcomes. The economic intelligence system is of particular importance for small and medium-sized enterprises (SMEs) that adopt professional business methods, as it enables them to access accurate information and strategic analyses that help them improve their

decisions, capitalize on opportunities, and reduce risks, which positively impacts their entrepreneurial performance and competitiveness in the markets (Al Baroudi & badri, 2014).

According to a study by Zhang et al., (2022), entrepreneurial performance is defined as: "The extent to which an organization achieves a specific mission or goal during the entrepreneurial process, and is a key factor in explaining entrepreneurial outcomes and the organization's overall competitive advantage".

Entrepreneurial performance refers to the outcomes resulting from entrepreneurial activities, including financial results, growth indicators, and non-financial aspects such as innovation and market development (Wiklund & Shepherd, 2005).

Entrepreneurial performance is the result of an interaction of a number of factors, including the organization's entrepreneurial capabilities, leader behavior, market environment, and the use of available information and resources. Accordingly, economic intelligence is an essential tool for improving this performance by supporting decision-making and enhancing the organization's strategic vision.

Previous Studies:

Esaa et al., (2025) studied, "*Economic Intelligence as a Comprehensive Guide to Understanding the Business Environment*," aims to shed light on the role of economic intelligence in enhancing the performance of economic institutions and increasing their competitiveness in the modern business environment. The study relied on a descriptive and analytical approach, examining concepts and theories related to economic intelligence and its relationship to improving institutional performance. The results concluded that employing economic intelligence tools provides accurate information and advanced analysis, which supports informed strategic decision-making, contributes to anticipating future trends, and develops administrative processes such as risk management, competitor analysis, and strategic planning.

Kulaib and Nidaa (2022) conducted a study titled "*The Role of Economic Intelligence in Enhancing the Competitiveness of Economic Institutions in a Number of Arab Countries, with Reference to Iraq*." The study aimed to analyze the reality of Iraqi banks in employing economic intelligence

applications to achieve a competitive advantage as economic institutions. The study addressed the concept of economic intelligence, its importance, characteristics, types, and stages, in addition to the concept of competitiveness and its relevance to economic institutions and its applications in the banking sector.

The Researchers adopted a deductive approach and an analytical approach to construct a model of economic intelligence and the competitive advantage of institutions based on Arab and local models. The results demonstrated that Mansour Bank sought to enhance its competitiveness compared to the Iraqi Credit Bank, benefiting from the facilities provided to customers, developing technical means and electronic services, and leveraging international expertise. The study also recommended that managers of the banks in the research sample demonstrate realism and competence, enabling them to manage the institution effectively. They also recommended delegating authority to their assistants to devote themselves to planning, organizing, and forecasting, while relying on practical and academic expertise to meet the requirements of competitive markets. She also emphasized that improving strategic performance in the competitive arena is linked to an organization's ability to implement its chosen competitive strategy by attracting customer interest and distinguishing its products from those of competitors, thus achieving its objectives.

Al Shariyani and Ajina (2023) studied, "*The Reality of Economic Intelligence in Small and Medium Enterprises in Muscat Governorate, Sultanate of Oman*," addressed the reality of applying economic intelligence concepts within this sector. The researcher used a descriptive-analytical approach, in addition to a field survey, to achieve the study's objectives. The sample included (150) participants. The results showed that the level of economic intelligence application in small and medium enterprises in Muscat Governorate was average, with an arithmetic mean of (3.61). It was also found that the field of "strategic vigilance" received an average acceptance rate of (3.64), as did "information technology" with an average of (3.57). Based on the results, the researcher made a number of recommendations, most notably organizing educational and awareness seminars in these institutions to raise awareness of the importance of adopting economic intelligence, in addition to providing training programs for workers in this field.

Rastogi and Pandita (2025) presented a study titled "*Driving Entrepreneurial Success: Adapting to AI-Driven Transformation through Workforce Flexibility and Sustainability.*" The study focused on exploring the opportunities and challenges posed by AI developments for entrepreneurs, offering practical insights for navigating the ever-changing business environment. The study contributed to the literature by analyzing the impact of AI-driven transformation on building dynamic capabilities, particularly in the areas of sensing, seizing opportunities, and influencing change within entrepreneurial ventures. It also addressed a research gap by assessing the role of workforce flexibility as a mediating factor in this process, an aspect that has received insufficient empirical attention. Furthermore, the study expanded the discussion to include the social, psychological, and ethical dimensions of AI adoption and its impact on entrepreneurial teams, a topic that remains under-researched in existing studies. In doing so, the study bridges a multidimensional gap by linking AI adoption with strategic adaptability and sustainable entrepreneurial performance, while strengthening the theoretical framework in light of dynamic capabilities theory.

Hypothesis:

There are statistically significant differences in the impact of economic intelligence in improving entrepreneurial performance, attributed to differences in demographic variables (education, age experience). The following sub-hypotheses emerge from it:

- 1- There are statistically significant differences in the impact of economic intelligence in improving entrepreneurial performance attributed to the education variable.
- 2- There are statistically significant differences in the impact of economic intelligence in improving entrepreneurial performance attributed to the age variable.
- 3- There are statistically significant differences in the impact of economic intelligence in improving entrepreneurial performance attributed to the experience variable.

Methodology:

This section tackles the methods adopted in this study; study design, sampling, and methods of data collection.

Study Design:

The study design for examining the impact of economic intelligence on improving entrepreneurial performance adopts an analytical cross-sectional design to collecting and analyzing data. This design ensures that the research objectives are met while maintaining scientific rigor.

The key components of the study design include the research approach, sampling method, data collection techniques, data analysis strategy and interpret the results obtained and determine the possibility of generalizing them.

To study the research topic and address it from its various dimensions, the descriptive analytical approach was relied upon, which aims to collect information related to the problem under study by collecting primary data using a questionnaire specifically designed to achieve the study objectives, then analyzing that data, interpreting the results reached, and determining the possibility of generalizing them.

Sampling Method:**Study Population:**

The target population for this study consists of entrepreneurs and business owners across various industries and geographical locations in Kingdom of Saudia Arabia. The focus is on small and medium-sized enterprises (SMEs) as they often face unique challenges and opportunities in utilizing economic intelligence effectively.

Sampling Technique:

Given the population structure, simple random sample design is applied for selecting the necessary samples.

A simple random sample was used, where the sample size was calculated using the equation (Thompson, 2012). Applying the equation resulted in a number of (160) individuals as a sample for the study, as the sample was representative of the study population. To collect primary data for the research, (152) questionnaires were retrieved, with a recovery rate of approximately (95%).

Data collection methods:

The research relied mainly on primary data collected through the use of a structured questionnaire designed specifically to achieve the aim of the study and was previously tested in order to ensure the validity and reliability of the questionnaire.

Data Analysis:

The data was processed using the statistical program SPSS version 25, and the validity and reliability of the questionnaire were verified using the Cronbach's alpha reliability coefficient and the correlation coefficient. Descriptive statistics and inferential statistics were used to analyze the data, represented by the following statistical choices:

Arithmetic mean, standard deviation, percentages, weighted average, one-sample T-test, independent sample t-test, the correlation coefficient, and ANOVA test (One Way analysis of variance) and use the LSD test to find out the smallest differences.

A five-point Likert scale was used to measure the respondents' responses to the questionnaire statements by choosing one answer from among a number of options.

Arithmetic means were used to describe the trends of the study items towards the study variables as shown in Table (1):

Table (1)

Rating scale according to the five-point Likert scale

Response	Weighted mean	Impact level
1-1.80	Strongly disagree	Low
1.81-2.60	Disagree	
2.61-3.40	Natural	Medium
3.41-4.20	Agree	High
4.21-5	Strongly agree	

Reliability:

An exploratory sample of 30 individuals from outside the study sample was selected and statistical analysis was conducted to ensure reliability by using the test and retest method to verify the reliability of the questionnaire, then using the Pearson correlation coefficient in the first test and also when retesting for the second time, where the value of the reliability coefficient was 0.88. The internal consistency coefficient of the tool was also found using the Cronbach's alpha equation, for each axis of the questionnaire as well as for the whole questionnaire. It was found that all values of the Cronbach's alpha coefficient for each axis of the questionnaire were 0.92 and more, which indicates and confirms the reliability of the scale, as well

as when the scale was conducted on all questionnaire questions had a Cronbach's alpha value of 0.92, and this also confirms the reliability of the scale for the whole questionnaire, as shown in Table (2) .

Table (2)

Shows Cronbach's alpha values

Axis	Number of questions	Cronbach's alpha reliability coefficient
Economic Intelligence	5	0.92
Entrepreneurial Performance	5	0.93
The relation between Economic Intelligence and Entrepreneurial Performance	4	0.91
All questionnaire	14	0.92

Validity:

The questionnaire was presented to arbitrators to verify its effectiveness, its achievement of the objectives of the study, and its ability to measure the dimensions targeted by the study. The internal consistency of the questionnaire phrases was also calculated on the exploratory sample of the study by calculating the Pearson correlation coefficient between each of the phrases of the questionnaire axes and the overall average of the phrases in the axis, where it was found that all correlation coefficients have statistical significance as they are all less than 0.05, and this indicates the strength of internal consistency and thus all axes of the questionnaire are considered true to what they were designed to measure.

Study results:

Demographic variables:

Table (3)

Shows the distribution of study sample members according to demographic variables

Gender	frequency	%
Male	45	29.6%
Female	107	70.4%
Total	152	100
Education level		
Secondary and less	8	5.3%
University and above	144	94.7%
Total	152	100

Gender	frequency	%
Age		
20 – 30	88	57.9
30 – 40	8	5.3
40 +	56	36.8
Total	152	100
Experience		
< 3	56	36.8%
3 – 5	32	21.1%
5 +	64	42.1%
Total	152	100

Table (3) shows the distribution of the study sample members by gender, educational level, age and expectance years. The study showed that the percentage of males was (29.6%), while the percentage of females was (70.4%) which is the highest percentage.

Also, the result shows that the educational level secondary and less was (5.3%) which is the lowest percent, and the educational level university and above (94.7%) which is the highest percent. Also, the result shows that the age from (30 to 40) years was (5.3%) which is the lowest percent, and the age 40 years and above was 36.8% which is the highest percent. Also, the result shows that the experience years from three to five years was (21.1%) which is the lowest percent, and the experience years five and more was (42.1%) which is the highest percent.

Table (4)
results analysis of the questionnaire axes

Questionnaire topics	N	Mean	SD	Sig.	Impact level	Ranking
The role of Economic Intelligence	5	4.4	0.57	0.001	high	2
The role of Entrepreneurial Performance	5	4.3	0.72	0.000	high	1
The relation between Economic Intelligence and Entrepreneurial Performance	4	4.4	0.62	0.010	high	3
All	14	4.36	0.64	0.000	high	

Table (4) shows that there are statistically significant differences from the mean value of scale (3) at a significance level of (0.05) for all axes of

the questionnaire, which indicates that there are a difference between the answers of the sample members and the average for all statements in each axis of the questionnaire, where the axes' averages were limited to (4.3-4.4) (Strongly agree), which shows that the impact level is high in all aspects of the questionnaire.

The arithmetic means and standard deviation of the mean of the answers to the statements of each axis of the study were also calculated to determine if there is statistical significance for the mean of the scale (value 3) using the one-sample t-test, as shown in Tables (5, 6, 7).

Table (5)

The role of economic intelligence in improving entrepreneurship

Questionnaire topics	N	Mean	SD	Impact level	Ranking
Your organization relies on economic data to analyze market trends and make strategic decisions.	152	4.42	0.676	high	3
Economic data analysis tools and techniques are used regularly in your business.	152	4.26	0.851	high	5
The institution provides adequate training for its employees to understand and analyze economic data.	152	4.53	0.597	high	1
Economic intelligence helps in making accurate strategic decisions that are in line with market needs.	152	4.53	0.680	high	2
Economic trends are continuously analyzed to guide the organization's marketing and sales strategies.	152	4.37	0.811	high	4
All	152	4.42	0.723	high	

After calculating the mean and standard deviation of the answers to the variables of the role of Economic Intelligence, it became clear that the phrase “The institution provides adequate training for its employees to understand and analyze economic data” and “Economic intelligence helps in making accurate strategic decisions that are in line with market needs” obtained the highest average (4.53), while the phrase “Economic data analysis tools and techniques are used regularly in your business.” obtained the lowest average and its value is (4.26).

As noted in Table (5), the average response of all sample members to all statements regarding the axis of the role of Economic Intelligence was equal to (4.42). This value is higher than the average value of the scale, indicating that there is agreement from all sample members regarding the axis' statements in general, and this agreement high "all the answers of questions more than (4.21)" which indicate that the impact level according to the five-point Likert scale was high. The t-test analysis of the single sample also indicated the presence of a statistically significant difference, as it is less than (0.05). This indicates that the average response score to the axis of the role of Economic Intelligence differs fundamentally from the average approval score (3), indicating that the Economic Intelligence have clear contributions to supporting entrepreneurial performance and development, varying in importance. As all questions on the role of economic intelligence in improving entrepreneurial performance have averages more than (4.21), which indicates that the level of influence is high. This may be due to the great interest that entrepreneurial companies give to economic intelligence and linking it to market needs and development and benefiting from the results obtained in a way that contributes to serving society and achieving development and progress in entrepreneurship.

Table (6)
Factors lead entrepreneurial performance success

Questionnaire topics	N	Mean	SD	Impact level	Ranking
The organization is able to innovate new products and services based on accurate economic analysis.	152	4.53	0.821	high	1
Leadership in the organization relies heavily on economic data in making its strategic decisions.	152	4.32	0.801	high	3
Economic intelligence-based decisions positively impact innovation and increase an organization's competitiveness.	152	4.47	0.680	high	2
The organization is able to quickly adapt to economic changes and achieve successful strategies in the market.	152	4.16	0.877	high	5
The Foundation provides an environment that stimulates entrepreneurial thinking and supports innovation based on economic analysis.	152	4.26	0.912	high	4
All	152	4.35	0.818	high	

After calculating the mean and standard deviation of the answers to the variables of the improving entrepreneurial performance using economic intelligence, it became clear that the phrase “The organization is able to innovate new products and services based on accurate economic analysis” obtained the highest average (4.53), while the phrase “The organization is able to quickly adapt to economic changes and achieve successful strategies in the market” obtained the lowest average and its value is (4.16).

As noted in Table (6), the average response of all sample members to all statements regarding the axis of the improving entrepreneurial performance using economic intelligence is equal to (4.35). This value is higher than the average value of the scale, indicating that there is agreement from all sample members regarding the axis’ statements in general, and this agreement is high. “All the answers of questions more than (4.21)” which indicate that the impact level according to the five-point Likert scale was high. The t-test analysis of the single sample also indicated the presence of a statistically significant difference, as it is less than (0.05). This indicates that the average response score to the axis of the improving entrepreneurial performance using economic intelligence differs fundamentally from the average approval score (3), indicating that the Economic Intelligence have clear contributions to supporting Entrepreneurial Performance and development, varying in importance. As all questions on the role of economic intelligence in improving entrepreneurial performance had averages more than (4.21), which indicates that the level of influence is high. This may be due to the great interest that entrepreneurial companies give to economic intelligence and linking it to the market needs and development and benefiting from the results obtained in a way that contributes to serving society and achieving development and progress in entrepreneurship.

Table (7)

The relation between Economic Intelligence and Entrepreneurial Performance

Questionnaire topics	N	Mean	SD	Impact level	Ranking
There is a clear link between improving entrepreneurial performance and using economic data in decision-making.	152	4.53	0.597	high	1
Economic intelligence enhances the ability of an organization's leadership to make innovative decisions that lead to market superiority.	152	4.26	0.851	high	4

Questionnaire topics	N	Mean	SD	Impact level	Ranking
By using economic intelligence, the ability to predict economic trends and achieve entrepreneurial success is improved.	152	4.37	0.668	high	2
The Foundation promotes a culture of decision-making based on economic analysis, leading to improved entrepreneurial performance.	152	4.26	0.716	high	3
All	152	4.35	0.708	high	

After calculating the mean and standard deviation of the answers to the variables of the relation between Economic Intelligence and Entrepreneurial Performance axes, it became clear that the phrase “There is a clear link between improving entrepreneurial performance and using economic data in decision-making.” obtained the highest average (4.53), while the phrase “Economic intelligence enhances the ability of an organization's leadership to make innovative decisions that lead to market superiority” and “The Foundation promotes a culture of decision-making based on economic analysis, leading to improved entrepreneurial performance” obtained the lowest average and its value is (4.26).

As noted in Table (7), the average response of all sample members to all statements regarding the axis of the relation between Economic Intelligence and Entrepreneurial Performance is equal to (4.35). This value is higher than the average value of the scale, indicating that there is agreement from all sample members regarding the axis' statements in general, and this agreement is high “all the answers of questions more than (4.21)” which indicate that the impact level according to the five-point Likert scale is high. The t-test analysis of the single sample also indicated the presence of a statistically significant difference, as it is less than (0.05). This indicates that the average response score to the axis of the relation between economic intelligence and entrepreneurial performance differs fundamentally from the average approval score (3), indicating that the Economic Intelligence have clear contributions to supporting entrepreneurial performance and development, varying in importance. As all questions on the role of economic intelligence in improving entrepreneurial performance had averages more than (4.21), which indicates that the level of influence is

high. This may be due to the great interest that entrepreneurial companies give to economic intelligence and linking it to market needs and development and benefiting from the results obtained in a way that contributes to serving society and achieving development and progress in entrepreneurship.

Verifying study hypotheses:

Verification of sub-hypothesis (1):

To verify that there are statistically significant differences in the impact of economic intelligence in improving entrepreneurial performance attributable to the education level variable as it shown in Table (8) below:

Table (8)

Shows the values of means, standard deviations, and the significance level of the education variable

Axis	Education	N	Mean	SD	Sig.
Economic Intelligence	Secondary and less	8	4.89	0.005	0.003
	University and above	144	4.39	0.569	
	Total	152	4.64	0.287	
entrepreneurial performance	Secondary and less	8	4.79	0.091	0.009
	University and above	144	4.311	0.730	
	Total	152	4.550	0.411	
Relation between Economic Intelligence and Entrepreneurial Performance	Secondary and less	8	5.000	0.009	0.002
	University and above	144	4.319	0.619	
	Total	152	4.66	0.355	
All		152	4.617	0.351	0.031

Table (8) shows the means, standard deviation and significance level for the axes of the role of economic intelligence in improving entrepreneurial performance using economic intelligence according to the education variable, as it is clear from the table above that the probability value of the t-test for independent samples indicated the presence of a statistically significant difference at the level of 0.05 or less for all questionnaire axes according to the education factor and the values were (0.003, 0.009, 0.002) respectively, as the significance level values for all axes are less than the significance level of (0.05), which indicates that there are statistically significant differences between education levels and all axes.

Table (9)

Shows the values of means, standard deviations, and the significance level of the age variable

Axis	Age	N	Mean	SD	Sig.
Economic Intelligence	20 – 30	88	4.363	0.593	0.098
	30 – 40	8	4.800	0.004	
	40+	56	4.457	0.557	
	Total	152	4.421	0.570	
entrepreneurial performance	20 – 30	88	4.309	0.608	0.032
	30 – 40	8	4.911	0.005	
	40+	56	4.314	0.895	
	Total	152	4.347	0.727	
Relation between Economic Intelligence and Entrepreneurial Performance	20 – 30	88	4.364	0.593	0.096
	30 – 40	8	4.802	0.008	
	40+	56	4.457	0.558	
	Total	152	4.540	0.386	
All		152	4.436	0.561	0.450

Verification of sub-hypothesis (2):

To verify that there are statistically significant differences in the impact of economic intelligence in improving entrepreneurial performance attributable to the age variable.

table (9) shows the means, standard deviation and significance level for the axes of the role of economic intelligence in improving entrepreneurial performance, improving entrepreneurial performance using economic intelligence according to the age variable. as it is clear from table (8) above that the probability value of the one-way ANOVA test which compares the means of the axes. indicates that there is no statistically significant difference at the level of (0.05) or less for the role of economic intelligence axes and the relation between economic intelligence and entrepreneurial performance according to the age factor (0.098, 0.96) Which indicates that there are no statistically significant differences between age groups in that axes., but there is significance level values (0.032) for axis of improving entrepreneurial performance using economic intelligence are less than the significance level of (0.05), which indicates that there are statistically

significant differences between age and axes of improving entrepreneurial performance using economic intelligence.

To reveal the sources of differences, the Least Significant Difference (LSD) test was used to determine the validity of the differences between age groups for each axis.

To identify the sources of differences, the LSD test was used to determine the validity of the differences between age groups for the axis of improving entrepreneurial performance using economic intelligence. The test then found significant differences between the groups, indicating that the differences were in favor of ages under (40) years old. This can be explained by the fact that the younger age group is often a group that always seeks technology and economic intelligence tools more than the older age group.

Table (10)

Shows the values of means, standard deviations, and the significance level of the experience variable

Axis	Experience	N	Mean	SD	Sig.
Economic Intelligence	< 3	56	4.371	0.685	0.345
	3 – 5	32	4.350	0.390	
	5+	64	4.500	0.533	
	Total	152	4.421	0.570	
entrepreneurial performance	< 3	56	4.371	0685	0.428
	3 – 5	32	4.200	0.431	
	5+	64	4.400	0.867	
	Total	152	4.347	0.727	
Relation between Economic Intelligence and Entrepreneurial Performance	< 3	56	4.371	0.686	0.355
	3 – 5	32	4.350	0.390	
	5+	64	4.500	0.533	
	Total	152	4.407	0.536	
All			4.292	0.611	0.376

Verification of sub-hypothesis (3):

To verify that there are statistically significant differences in the impact of economic intelligence in improving entrepreneurial performance attributable to the experience years variable.

Table (10) shows the means, standard deviation and significance level for the axes of the role of economic intelligence in improving entrepreneurial performance using economic intelligence according to the experience years variable. As it is clear from table (10) above, the probability value of the one-way ANOVA test which compares the means of the axes, indicates that there is no statistically significant difference at the level of (0.05) or less for the role of economic intelligence axes according to the age factor (0.345, 0.428, 0.355) respectively Which indicates that there are no statistically significant differences between experience years and all axes.

Results:

After conducting this study in all its stages and analyzing of the questionnaire, the following results are reached:

- 1- The study shows that the percentage of females was (70.4%) which is the highest percentage. Also, educational level university and above was (94.7%) which is the highest percent. In addition, the experience years five and more was 42.1 is the highest percent. And, the age (40) years and above was (36.8%) which is the highest percent.
- 2- In the axis of the role of Economic Intelligence, it was found that the average response of all sample members to all axis statements was equal to (4.42), and the t-test analysis for the single sample indicates the presence of a statistically significant difference because it is less than (0.05).
- 3- Regarding the axis of the role of improving entrepreneurial performance using economic intelligence, it was found that the average response of all sample members to all the axis statements was equal to (4.35), and this value is higher than the average value of the scale. The t-test analysis for the single sample indicated the presence of a statistically significant difference because it is less than (0.05).

Recommendations:

Based on the findings of this study, several recommendations can be made to optimize the study environment and enhance academic performance:

- 1- Developing systems that provide accurate economic data to entrepreneurs.
- 2- Developing and integrating economic intelligence into strategic planning.
- 3- Continuous training on how to interpret economic reports and utilize data and market indicators.

- 4- Leveraging economic intelligence to guide investments in new technologies and digital tools.
- 5- Partnering with universities, entrepreneurship associations, and government agencies to obtain updated economic insights that improve entrepreneurial performance

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