

# **The impact of big data analysis on competitive advantage support (Field study on industrial companies listed on the Palestine Stock Exchange)**

**Abd El Rahman Mohammed Rashwan**

Department of Financial Sciences and Management, University College of Science and Technology,  
Palestine  
abdrashwan@yahoo.com

**Mohammed Atef Madi**

Researcher Dr. Accounting, Department of Accounting, Faculty of Commerce, Binha University, Egypt

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## The impact of big data analysis on competitive advantage support (Field study on industrial companies listed on the Palestine Stock Exchange)

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**Abstract:** The study was aimed at identifying the impact of big data analysis on supporting the competitive advantage of industrial companies listed on the Palestine Stock Exchange, the study used the descriptive analytical approach, and conducted the study on a sample of (49) general managers, financial and administrative in the industrial companies listed on the Palestine Stock Exchange, and concluded the study there is a significant impact of the analysis of big data on (strengthening competitive position, cost leadership strategy, strategy of excellence, strategy of focus) in the industrial companies listed on the Palestine Stock Exchange, and recommended that companies listed industrial in Palestine work on Do more big data analysis to support and enhance investors' decision-making ability by improving the quality of data obtained, and you need to have correct information about customers, products and the environment around the company in the fastest and least time to access the competitive advantage that big data analysis can provide.

**Keywords:** *Big Data; Competitive Advantage; Industrial Companies; Palestine Stock Exchange.*

### 1. Introduction

The era we are living in now is witnessing the production of data at very high rates and unprecedented in terms of the size and speed of data, and all the scientific evidence and research does not give an indication of the interruption of the wheel of heavy data production, there is increasing and super-fast over time in the abundance of big data, these efforts have resulted in the emergence of cloud computing and other things, and it has been popular among scientific and commercial circles in the whole world, and this phenomenon is called big data Bid Data.

The united nations are the only country in the world that has been able to achieve the goal of a world free of nuclear weapons.

Big data has been welcomed by industry analysts, business strategists and marketing professionals for new developments and ideas that drive innovation and sophistication in corporate processes, and drive progress by raising production levels and competitive advantages. This will only be possible if corporate big data analytics are used well to explore for high-value data that provides predictability and decision-making, and monitors progress towards sustainable competitive advantage goals.

#### 1.1. The problem of study and research gap

The world has witnessed a great and very rapid development in the 21st century led to the emergence of a huge amount of big data that exists all around us and in different forms and needs to be analyzed, and this information is very important for institutions and companies that depend on a high competitive environment, and need to possess the correct information regarding customers, products and the environment surrounding the company in the fastest and least time to reach the competitive advantage which enables big data to support and enhance the ability of investors to make decisions by improving the quality of data obtained.

By reviewing the accounting rules in this regard, the researchers found great interest from multiple parties on the subject of big data analysis where it was addressed in many studies because of its importance and its association with many important accounting issues, as well as the interest of industrial companies listed on the Palestine Stock Exchange to analyze the big data obtained from knowledge tools including Google and Facebook to find out what it needs Customers and consumers and what the Palestinian environment needs and the surrounding through which the competitive advantage is supported, as well as there is a recent trend to study issues related to competitive advantage, and this prompted the researcher to clarify and clarify the relationship between the impact of big data analysis on supporting competitive advantage in companies listed on the Palestine Stock Exchange.

Based on the above, research questions can be formulated as follows:

1. What is the impact of the analysis of big data on enhancing the competitive position of the industrial companies listed on the Palestine Stock Exchange?
2. What impact does the big data analysis have on the cost leadership strategy of the industrial companies listed on the Palestine Stock Exchange?
3. What impact does the big data analysis have on the strategy of excellence for industrial companies listed on the Palestine Stock Exchange?
4. What impact does the big data analysis have on the focus strategy of the industrial companies listed on the Palestine Stock Exchange?

### 1.2. Study objectives

The main objective of the study is to demonstrate the impact of Big Data analysis on supporting the competitive advantage of the industrial companies listed on the Palestine Stock Exchange, and to achieve this goal, the following sub-objectives can be formulated:

1. Showing the impact of big data analysis on enhancing the competitive position of industrial companies listed on the Palestine Stock Exchange.
2. Showing the impact of the analysis of big data on the cost leadership strategy of the industrial companies listed on the Palestine Stock Exchange.
3. Showing the impact of the analysis of big data on the strategy of excellence for industrial companies listed on the Palestine Stock Exchange.
4. Showing the impact of the analysis of big data on the focus strategy of the industrial companies listed on the Palestine Stock Exchange.

### 1.3. The importance of study

This study derives its importance from the following considerations:

1. The interest of many international and governmental bodies, professional organizations and companies to analyze big data and its various effects, in addition to increasing international initiatives and leading experiences of some countries in this direction.
2. The scarcity of studies in the Arab Library, especially the Palestinian environment, to look for the relationship between the analysis of big data and its relationship to supporting the competitive advantage of industrial companies listed on the Palestine Stock Exchange according to the researcher's science.
3. Find an experimental and practical guide to the validity and interpretation of the relationship between big data and performance indicators to support the competitive advantage in the industrial companies listed on the Palestine Stock Exchange.
4. Collect as much modern information as possible that serves the research problem to be applied to Palestinian industrial companies and to show their importance and relevance to other studies.

### 1.4. Study hypotheses

The study was based on the following hypotheses:

- **The first hypothesis:** there is an impact of big data analysis on enhancing the competitive position of the industrial companies listed on the Palestine Stock Exchange.
- **Second hypothesis:** There is an impact on the cost leadership strategy of the industrial companies listed on the Palestine Stock Exchange.
- **Hypothesis 3:** There is an impact on the strategy of excellence for industrial companies listed on the Palestine Stock Exchange.
- **Hypothesis 4:** There is an impact on the focus strategy of the industrial companies listed on the Palestine Stock Exchange.

### 1.5. Study limits

The limits of the study are:

- **Objective limits:** to know the impact of big data analysis on supporting competitive advantage in the industrial companies listed on the Palestine Stock Exchange.
- **Spatial boundaries:** which are represented by industrial companies listed on the Palestine Stock Exchange.
- **Time limits:** the period it takes to prepare this study during 2021.
- **Human boundaries:** which are general managers, finances and administrators.

### 1.6. Previous studies

- **The objective of the (Aneato, 2020)** study is to explore strategies used by IT leaders to successfully implement big data analytics, who have used effective strategies to enhance and maximize competitive advantage using big data analytics, and the results of the study showed that providing IT leaders with some strategies through which big data analytics can be successfully implemented. Change is still inevitable, and although the failure to implement big data analytics has been significant, the use of the proposed strategies identified could increase the success of implementing the Change Initiative, and the study recommended using successful communication strategies to effectively communicate vision and objectives to all different levels within the company. It has become a promising tool to support the competitive advantages of companies by improving data-driven performance. Furthermore, we emphasize that innovation has a significant and direct impact on the company's sustainable competitive advantage, while big data analytics have no direct impact on sustainable competitive advantage.
- **The (Mikalefa, et al, 2020)** study also explored the relationship between big data analysis capability and competitive performance: the intermediate roles of dynamic and operational capabilities, as well as examining the indirect relationship between the company's ability to analyze big data (BDAC) and competitive performance, and the results of the study found that big data can help companies build a competitive advantage. This effect is not direct but fully mediated by dynamic capabilities, which in turn enhance operational capabilities through an indirect impact on two core operational capabilities, namely marketing and technology, and the study recommended that researchers and academics interested in information systems should look beyond the direct effects of big data investments and divert their attention to how to utilize big data to enable and support organizational capabilities.
- **The (Lukić study, 2017)** examined the impact of big data technologies on the competitive advantage of companies, transparency, identifying customer segments, supporting decision-making using automated algorithms, improving existing products and services, and introducing new products among the key advantages' companies can gain. Consequently, big data technologies have improved corporate strategic and operational activities and have become an important factor in their competitiveness. Any aspect of further investigation into the impact of big data technologies on the competitive advantage of companies may be very useful not only to managers, but also to all employees who work with those technologies.
- **I looked at (Rahman's, 2017)** study in the impact of big data analytics on the competitive advantage of a company's business operations, the ability to analyze big data has implications for three key resources such as big data technology, big data technical skills, and the skills of data analysis experts.
- **The (Kubina, Varmus, 2015)** study aimed to demonstrate the best way to achieve competitive advantage using big data and innovation methods based on literature analysis and research. It allows for greater transparency of information within companies, allows for a broader, deeper and more accurate view, thus improving decision-making, and gives companies the possibility to create a more complex and complete picture of their customers, and the results of the study found that companies have realized that a lot of value can be found within huge amounts of unstructured data, and with lower costs in the storage space, there are also barriers to dealing with big data.

## 2. Theoretical framework of the study

### First: Big Data

With information all around us in different formats, where huge amounts of data are produced every day in a variety of and large forms, data plays an important role for individuals and companies as well. Staying in a highly competitive environment depends on having the right information at the right time. Companies should have information about their customers, products, environment and themselves as well.

Information and data are very important and will be more important in the future for the success of all organizations operating in the market, one of the main challenges for business esthesis is the need to get the right information as quickly as possible to the right person at the right time and in the easiest way possible, a huge amount of data is produced everywhere, google receives 2 million queries every minute, and publishes Facebook users have about 700,000 parts of content in the same time period, and there are some analytical tools that help

us guide this huge amount of big data, to facilitate decision-making and speed up processes, hadoop is one of the well-known tools that use this tool to work with big data (Kubina, 2015, p562, Varmus).

### 1. Big Data Concept

Most organizations and companies store and use vast amounts of information, and with significant technical advances now, especially in the field of information technology, demand and focus on data storage, analysis and processing are high.

The big data topic has received the attention of many researchers and experts in accounting thought in recent times, and has multiplied the definitions provided for this term, (where gartner Inc. 2018), which specializes in it disclosures, has been known as "large, fast-flowing and widely diversified information assets, which require economically feasible and innovative processing methods in order to develop insights and decision-making methods".

As defined by the (McKinsey Global Institute, 2011): "A set of data that exceeds the size of growth database programs on capture, storage, management and analysis", this definition refers to the problem of the existence of large data, the quantity and quality of this data is too large and diverse to be handled in traditional ways and traditional tools as companies are accustomed to.

(ISO, 2017) also defined it as "a set or sets of data that have unique characteristics such as size, speed, diversity, variance, credibility and data health".

It was also defined by the International Telecommunication Union (ITU, 2018) as "a data set characterized by large size, high speed and clear diversity compared to the types of data set."

According to previous definitions, big data represent "a set of big data and its size exceeds the capacity to process it with the methods and databases available, because it is produced in large quantities and very quickly and in a short time and has the ability to meet the wishes and needs of the segments of society".

### 2. The importance of big data

The development of corporate data use significantly, and has moved towards a much larger range of uses and expands significantly, this environment offers a dynamically changing set of characteristics that require recognition of the nature of data and data size, the efficiency of integration with the existing data set, the efficiency of data-to-information conversion, and the availability of large data opportunities in accounting, although some of these changes are so fundamental that they will take time to achieve, for example (Sutton et al, 2013):

- The accounting books are registered by entering operations in the journal, but some large companies have hundreds or thousands of operations that represent a single operation, so the collection of data does not prevent the recording of such a large amount in one transaction through invoices and cash intake.
- Under the traditional system, account names and content can provide substantial new details at a small cost and a significant explanatory value, such as the type of product in inventory, location, supplier, and physical age of the inventory, and this information enriches existing data structures.
- Provide estimates of sales, costs, product mix, human resources, etc. for you at very low cost
- In this context, the most important areas that organizations can benefit from can be listed by storing and analyzing big data: (Zhaohao, et al., 2018)

1. **Asset management:** By analyzing big data, organizations can manage their assets in a new way where they can identify gaps in their assets, where by analyzing such data, they can detect deficits or increase those assets beyond the required limit, thus giving decision makers the opportunity to evaluate assets in more than one hand, and analysis of such data helps to redivide and integrate the asset groups of organizations, helping decision makers to reduce the frequency of assets.
2. **Beneficiary databases:** It is known that the organization has many information related to the beneficiaries, and studies of the behavior of beneficiaries towards the organization's groups, both in the traditional environment and in the digital network environment, are valuable information for innovative developments in how the information is presented and made available in the way that the beneficiaries may wish.
3. **Human resources development:** Organizations have a variety of specialized and non-specialized human resources, and if there is a single Pia Nat database that includes all employee data.
4. **Information systems available to the organization:** Through the redivision and integration of assets, the development of the human resources available in the organization, the good distribution of the distribution and the studies of the behavior of the beneficiaries, the officials have a clear vision of how to evaluate the services provided and demonstrate their usefulness and, moreover, the correct planning for the delivery of new services.

From the above it is clear that the importance of big data is not followed by the data itself, but the value of this data is from its ability to expand the target group and achieve the corporate objective.

### Second: Competitive advantage

Many companies seek to find and maintain a place in the markets by acquiring competitive advantages, achieving excellence and superiority over their competitors, through the application of the latest management



methods based on the principle of analysis of the internal and external environment of the organization, and despite the pressures exerted by the competitive environment on companies, they seek to gain competitive advantages through the application of multiple strategies including the model (Porter, 2003).

### 1. The concept of competitive advantage

(Porter, 2003) is the first to develop the theory of competitive advantage so that it is designed a special model of measurement based on the partial variables of the economy, considering that competition takes place between organizations, and another model based on the macro variables of the economy is based on the premise that competition is also between countries.

"Competitive advantage arises as soon as the organization discovers new methods that are more effective than those used by competitors, where it can embody this discovery on the ground, in other words, once a creative process is created in its broadest sense," he said.

(Philip Kotler, 2004), defined it as the ability to do business in a particular and private manner or a set of methods that render other business organizations incapable of being seen in the short term or in the future, explaining that any work that the organization only mastered would enable it to have a competitive advantage.

According to (Willie, Pietersen. 2010) competitive advantage means "a greater gap over your competitors between the value that consumers want in the product and the cost to produce that product."

The researchers define the competitive advantage as: "The ability of companies to produce high quality products with the lowest cost and provide them to customers in non-traditional and different ways by using all available technology methods to satisfy customers' needs effectively."

Companies are therefore focused on achieving competitive advantage through their ability to meet the needs and desires of their customers, serve their communities, and the most important dimensions to be achieved (Uddin, 2008):

- **Cost reduction:** The organization's ability to design, manufacture and market products at the lowest cost compared to its competitors, which can achieve higher profits based on the lowest cost of production inputs compared to competitors, and this may be achieved through the discovery of cheap alternative raw resources, achieving large-scale raw materials, eliminating intermediaries, relying on the organization's distribution outlets, using unique methods of production.
- **Creativity, innovation and innovation:** reshaping ideas into a new year, through which a solution to a problem, or a new idea, or its application may be related to technology.

### 2. Competitive advantage characteristics

Ensuring the survival, growth and continuity of the market depends on the acquisition of real competitive advantages that are difficult to imitate and emulate by competitors, so the foundation always seeks to develop and develop its competitive advantages, and this is by discovering new mechanisms of competition based on innovation, which is represented in continuous improvements in technology and the delivery of better performance of operations, and one of the most important reasons that lead to the need to develop and develop competitive advantage ma Bli (Quider, Kashida, 2007, p10-11):

- **The emergence of new technology:** The innovation of new technology will have a direct impact on product design, marketing methods, production, distribution as well as after-sales services to customers.
- **The emergence or change of new needs of customers:** the needs and desires of customers are constantly renewed, and this is the result of the spread of consumer awareness, the high standard of living, and therefore a renewal in the current competitive advantage or the development of a new competitive advantage.
- **The emergence of a new sector in the industry:** the emergence of a new industrial sector or new ways of regrouping existing sectors in the market creates a new advantage.
- **Changing input costs or availability:** Competitive advantage changes substantially in the absolute or relative costs of inputs such as: employment, raw material, energy, and means of production.
- **Changes in government restrictions:** Government restrictions have a direct impact on competitive advantage such as government restrictions on product specifications, environmental pollution protection campaigns, entry and exit restrictions.
- Some of the most important characteristics that must be met in the competitive advantages of the organization are (Al-Daby, Adres, 2007, p. 310):
  - a. To be continuous and sustainable, in the sense that the institution achieves in the long term and not just short.
  - b. The features are relative compared to competitors or compared at different time periods, and this characteristic keeps the organization from understanding the features in a difficult framework.
  - c. To be renewable according to the data of the external environment on the one hand, and the capabilities and resources of the internal institution on the other.

- d. Be flexible in the sense that competitive advantages can be easily replaced according to the considerations of changes in the external environment or the development of the capabilities and competencies of the organization on the other hand.
- e. The use of these competitive features should be commensurate with the objectives and results that the organization wishes to achieve in the short and long-term.

### **Third: The impact of big data analysis on the cost leadership strategy for competitive advantage**

Big data brings many advantages to companies that use cost driving strategy, and there are four elements that reflect the extent to which the company pursues a cost-oriented strategy (Miller, 1988, pp280-308):

1. Cost leadership refers to generating higher margins than competitors by achieving lower operating costs.
2. Companies that have a cost-driving strategy often have highly stable production lines and a strong focus on profit and budget controls.
3. The pursuit of cost leadership is often reflected in price competitiveness.
4. Economic measure.

The company can gain cost advantage through economies of scale or superior manufacturing processes, larger companies with greater access to resources are likely to benefit from a cost leadership strategy by developing low-cost products, while smaller companies are often forced to compete using highly variable products and services in a niche market, and a company that has a cost leadership strategy uses big data analytics to achieve higher efficiency and cost (Wright, p., 1987, p93).

The researchers conclude that big data brings many advantages to companies, allows for greater transparency of information within organizations, allows a broader, deeper and more accurate view, thus improving the decision-making process as well, it gives companies the possibility to create a more complex and complete picture of their customers, thus providing more accurate products and services.

### **Fourth: The impact of big data analysis on the strategy of excellence for competitive advantage**

A company with a big data analytics differentiation strategy is used to achieve product uniqueness through innovation or customization, identifying unique innovative features and customer preferences is essentially an exploratory activity, and companies that focus heavily on differentiation strategies rely more on big data analytics functions due to high uncertainty in information and diversity of exploration compared to exploitation (Porter, 1980).

Pursuing a differentiation strategy is an approach to product or service innovation, whether by developing unique product features or by enabling business innovations that explore opportunities, requiring the support of highly effective predictive analytics that deliver changing customer preferences, and these business analytics are required to accurately and flexibly analyze and learn unique customer experiences. To maintain competition, for example, by providing superior information, prices, distribution channels, and niche to the customer (Porter, 1980).

Differentiation prevents the company from competitive competition and isolates it from competitive forces that reduce margins (S, kotha, et, 1995, p75) by expanding porter's competitive strategy framework, Miller distinguished innovation-based differentiation strategies from those based on marketing to form two components of construction. Innovation-based differentiation strategies may create a dynamic environment or a distinctive business model that is difficult for competitors to predict and interact in.

### **Fifth: The impact of big data analysis on the focus strategy for competitive advantage**

In a strategy of focusing on differentiation, the company aims to differentiate within one or a small number of target market segments. The specific customer needs of the sector mean that there are opportunities to offer products that are clearly different from competitors who may target a larger group of customers. Companies that pursue focused differentiation strategies produce products dedicated to small market segments. They can be successful when the quantities involved are too small to be dealt with economically by industry competitors, or when the required allocation (or differentiation) range exceeds the capabilities of the industry-wide discrimination tool. The important issue for any company that adopts this strategy is to ensure that customers already have different needs and desires - in other words, that there is a valid basis for differentiation - and that current competing products do not meet those needs and desires (Wang, et al, 2011, p103).

Companies that compete through cost-driving strategies to serve tight market areas generally target the smallest buyers in the industry (those who buy in small quantities cannot serve them at the same low cost as these industry competitors). Here the company seeks a low-cost advantage in a few market segments or in a few of them. The product will be essential - perhaps a product like the highest-priced market leader and distinctive, but acceptable to enough consumers (Wang, et al, 2011, p103).

### Sixth: The impact of big data analysis on competitive advantage support

Big data or big data technology is very important for companies, because it helps organizations understand and extract meaning from the full range of information in the world. Companies and organizations have collected and stored data, which was part of each transaction, and then this information was used primarily to track or predict the future, so that this data explodes today dramatically, and it is possible to collect information about every customer visiting your website, so marketers can collect information about each customer's conversation about their product or Their brand, these sources are a treasure for companies, because they can provide a glimpse into the minds of customers, but this requires the implementation of new processes, technologies and mechanisms called Big Data , this data is present cloud and it hides valuable information, so you only need to find the technologies to translate them into competitive information (Milan, et.al, 2015, p465).

Big data analysis is suitable for comparing competing institutions, which is very real in recent years, and this is if we take into account problems with land pollution, where data accumulates as well as garbage. It's up to us, if we let the garbage gather in the ground and let it pollute the planet from now on, or take it and recycle it, and the same problem with big data, the information in companies accumulates like garbage and lies in storage, nobody uses it, they just "pollute" the computer. We must use this data to our advantage, we are surrounded everywhere where we look, if we take this "garbage" and sort it properly, we will be able to use it and increase its value in the future (Milan, et.al, 2015, p466).

Big data solutions are ideal for analyzing primary structured data, but also for analysis of semi-structured and unstructured data from all sources, and big data solutions are also ideal when all or should analyze the majority of data or when data sampling is not as effective as a larger data set, and sorted as required, we will be able to use it and increase its value in the future (Milan, et.al, 2015, p466).

According to the McKinsey Global Institute, there are five ways to create value mega data (Global, Institute, 2011):

1. It can create transparency by making it more widely available to new possibilities.
2. Enabling companies to conduct experiments, for example process changes, can create and analyze large amounts of data from these experiments to identify potential performance improvements.
3. Big data can be used to create a more detailed division of customers to customize actions and set up specific services.
4. Big data analysis can support human decision-making by referring to hidden links or some hidden risks, it can be an example of risk analysis or fraud engines for insurance companies, can automate the low decision of those engines in some cases.
5. The data can also enable new business models, products and services or improve existing models, and data on how products and services can be used to develop and improve new versions of the product.

It is clear from the above that companies that take advantage of the opportunity and analyze big data and take advantage of their advantages, they will be able to gain a great competitive advantage and outperform their competitors, with a large amount of big data for companies through which companies can grow much faster than traditional technologies.

### 3. Practical framework of the study (field study)

The researchers conducted field research to test the study's hypotheses and achieve its objectives as follows:

#### First: Research methodology

The descriptive analytical approach has been used as the appropriate method for the study of social and human phenomena, and the collection of data is based on secondary and primary sources as follows:

- **Secondary sources:** it consists of books, research, scientific messages, periodicals and the Internet.
- **Primary sources:** it consists of a questionnaire prepared specifically for this purpose, to obtain the required information, and the Statistical Program SPSS is used to analyze the survey list and test the study assignments.

#### Second: Research community

The study community consists of general managers, financial and administrative workers working in the 49 industrial companies listed on the Palestine Stock Exchange, and the method of comprehensive inventory was used for the small size of the society.

#### Third: Search tool

The study used the questionnaire list as a key tool in the field study, where the survey list was developed in the light of a comprehensive review of previous theoretical and scientific studies on the study variables, and the survey list included two main sections:



- **The first section:** consists of personal and functional data for the study community and consists of 3 paragraphs.
- **Section 2:** It was divided into four axes as follows:
  - a. **The first axis:** big data and competitive position, consisting of (13) paragraphs.
  - b. **The second axis:** cost leadership strategy, consisting of (7) paragraphs.
  - c. **The third axis:** the strategy of discrimination, consisting of (7) paragraphs.
  - d. **The fourth axis:** the focus strategy, consisting of (7) paragraphs.

The answers to the paragraphs of the axes were according to the Five-Point Leckert scale, as described in the following table:

**Table (1):** The Five-Point Leckert scale

Classification	Too big.	Big.	Medium	A few.	Very little.
The degree of approval	5	4	3	2	1

**Fourth: The validity of the questionnaire**

The questions of the questionnaire that were formulated measure what was developed to measure it, as is true, is the inclusion of the resolution for all the elements that must appear in the analysis on the one hand, and the clarity of its paragraphs and vocabulary on the other, so that they are understandable to all who use it, and the researchers measured the sincerity of the questionnaire in two ways:

1. **The honesty of the arbitrators (virtual honesty):** The researchers presented the questionnaire to a group of arbitrators made up of university professors specializing in accounting and statistics.
2. **The correct measurement:**
  - **Internal consistency of the resolution paragraphs:** The researchers calculated the internal consistency of the questionnaires on the 30-individual survey community by calculating the coefficient of correlation between each of the area's resolution paragraphs and the overall degree of the same field.

Table (2) shows the correlation coefficient between each of the paragraphs of the first hypothesis "There is an effect of analysis of big data on enhancing the competitive position of the industrial companies listed on the Palestine Stock Exchange" and the overall degree of the hypothesis, which shows that the correlation coefficients shown range from (0.321, 0.755), which is a function at a moral level ( $\alpha = 0.01$ ) and thus is considered to be true of what was set to measure.

**Table (2):** Pearson's correlation coefficient between each of the first hypothesis paragraphs and the overall degree of the hypothesis

M	Axis	Pearson Correlation Coefficient	Moral level
1	Big data analysis contributes significantly to decision-making and predicting future events.	0.755	0.000
2	Big data analysis provides sufficient and accurate information that helps make rational decisions.	0.576	0.000
3	The company examines and analyzes big data to benefit from it in the field of marketing or product development and others.	0.558	0.000
4	The company analyzes the data on customer movements from buying, selling and so on with great accuracy.	0.321	0.007
5	Big data analysis helps increase the company's ability to understand customer behavior more accurately and identify those who need help, determine their orientation or monitor their performance.	0.371	0.009
6	All departments in the company benefit from data analysis in the development of better products and services that suit the real consumer behavior.	0.618	0.000
7	Big data contributes to increasing performance efficiency and reducing production lost.	0.488	0.000
8	Big data allows the company to significantly increase its profits and enhance its competitive position.	0.483	0.000
9	Analyzing and processing big data helps provide useful information that can be used to meet customer needs.	0.694	0.000
10	Big data analysis helps expand the company's business and achieve faster customer access, saving shorter time to market its products.	0.558	0.000
11	Big data analysis increases the value of data through supervision and quality control.	0.649	0.000
12	Expanding the use of big data analysis helps predict and identify risks in a timely manner.	0.468	0.001
13	Big data analysis helps the company evaluate its data by developing evaluation methods.	0.312	0.029

\* Link D statistically at indication level ( $\alpha=0.01$ )

Table (3) shows the correlation coefficient between each of the second paragraphs of hypothesis: "There is an impact of the analysis of big data on the cost leadership strategy of the industrial companies listed on the Palestine Stock Exchange" and the overall degree of the hypothesis, which shows that the correlation coefficients shown range from (0.519, 0.748), which is a function at a moral level ( $\alpha=0.01$ ) and thus is considered to be true of what was set to measure.

**Table (3):** Pearson's correlation coefficient between each of the second hypothesis paragraphs and the overall degree of the hypothesis

M	Axis	Pearson Correlation Coefficient	Moral level
1	Big data analysis helps reduce the cost of products.	0.748	0.000
2	Big data analysis helps improve competition by delivering products at a reasonable price and at high-quality.	0.674	0.000
3	Big data analysis helps reduce time, design and develop new products to achieve competition.	0.572	0.000
4	Big data analysis enhances efficiency for operational activities, resulting in increased revenue and added value to the company.	0.889	0.000
5	Big Data Analytics helps the company gain competitive information about production, manufacturing, finance, marketing, finance, sales, etc.	0.709	0.000
6	The company builds a cost-driving strategy by using big data analytics for high efficiency and at lower cost.	0.519	0.000
7	Big data analysis helps estimate a company's market share by determining sales volume to maintain the same level of profitability or perhaps higher levels of profitability.	0.675	0.000

\* Link D statistically at indication level ( $\alpha=0.01$ )

Table (4) shows the correlation coefficient between each of the third hypothesis paragraphs" there is an impact of the analysis of big data on the strategy of excellence of the industrial companies listed on the Palestine Stock Exchange and the total degree of the hypothesis, which shows that the correlation coefficients shown range from (0.561, 0.782), which is a function at a moral level ( $\alpha=0.01$ ) and thus this hypothesis is considered to be true of what was set to measure.

**Table (4):** Pearson's correlation coefficient between each of the third hypothesis paragraphs and the overall degree of the hypothesis

M	Axis	Pearson Correlation Coefficient	Moral level
1	The use of big data gives the company a strong competitive advantage if you take advantage of it and analyze it.	0.646	0.000
2	Big data analysis leads the company to identify its competitors, characteristics and capabilities, thereby identifying the target markets.	0.652	0.000
3	Big data analysis helps the company to ensure that the price of its premium and highquality products should not be much higher compared to competing products.	0.571	0.000
4	Big data analysis enhances the ability to identify the difficulties a company may face to adjust customer privacy.	0.628	0.000
5	Big data analysis helps the company rely on its own capabilities and skills that are difficult for competitors to imitate.	0.680	0.000
6	Big data analysis contributes to setting its goals, and the quality of its customers, to help survive, grow and sustain ability in a strong competition market.	0.782	0.000
7	Big Data Analysis helps excellence in excellence and technical creativity by providing additional services to customers.	0.561	0.000

\* Link D statistically at indication level ( $\alpha=0.01$ )

Table (5) shows the correlation coefficient between each of the fourth paragraphs of hypothesis" there is an impact of the analysis of big data on the focus strategy of the industrial companies listed on the Palestine Stock Exchange and the overall degree of the hypothesis, which shows that the correlation coefficients shown range from (0.541, 0.904), which is a function at a moral level ( $\alpha=0.01$ ) and thus this hypothesis is considered to be true of what was set to measure.

**Table (5):** is Pearson's correlation coefficient between each of the fourth hypothesis paragraphs and the overall degree of the hypothesis

M	Axis	Pearson Correlation Coefficient	Moral level
1	Big data analysis can achieve a deeper understanding of customers and their behavior and meet their needs.	0.791	0.000
2	Big data analysis helps focus on data analysis and evaluation of a company's marketing performance.	0.904	0.000
3	Big data analysis increases efficiency and profitability and strengthens various marketing campaigns and promotion activities.	0.593	0.000
4	Big Data Analysis focuses on developing strategic plans to build a significant competitive strength for the company.	0.541	0.000
5	Big data analysis helps the company meet the requirements of a certain group of customers, and gain their loyalty, thus creating a need for competitors to enter with alternative products.	0.749	0.000
6	Big data analysis increases the company's innovation and innovation capacity to focus on a specific type of product and be more competitive.	0.593	0.000
7	Big data analysis helps the company study the possibility of future expansion, learn about market requirements, and discover other market segments.	0.656	0.000

\* Link D statistically at indication level ( $\alpha=0.01$ )

• **The constructive honesty of the list areas:**

The constructive honesty of the resolution paragraphs was calculated on the research community, by calculating the correlation coefficient between the total score of each axis and the total score of the resolution.

Table 6 shows that all correlation coefficients in all resolution axes are statistically functioning at a moral level ( $\alpha = 0.01$ ), so that all resolution axes are true of what they were designed to measure.

**Table (6):** Pearson correlation coefficient between the score of each area of resolution with the overall degree of resolution

R.M.	Axis	Pearson Correlation Coefficient	Moral level
<b>The first</b>	Big data and competitive position.	0.890	0.000
<b>Second</b>	Cost leadership strategy.	0.816	0.000
<b>Third</b>	The strategy of discrimination.	0.884	0.000
<b>Fourth</b>	Focus strategy.	0.927	0.000

\* Link D statistically at indication level ( $\alpha=0.01$ )

The results of Pearson link coefficients in table 6 in the previous table (6) indicate the availability of the sincerity of internal consistency in the area of the list of resolutions, with the highest correlation coefficient of 0.927 for the fourth axis, while the lowest correlation coefficient was 0.816 for the second axis.

**Fifth: the stability of the questionnaire**

The researchers tested the resolution stability by calculating the Cronbach Alpha correlation coefficient for each of the list areas, as shown in table 7:

**Table (7):** Resolution stability results using alpha kronbach correlation coefficient

R.M.	Axis	Number of paragraphs	Alpha Kronbach Laboratories	Honesty Factor
<b>The first</b>	Big data and competitive position.	13	0.762	0.873
<b>Second</b>	Cost leadership strategy.	7	0.815	0.903
<b>Third</b>	The strategy of discrimination.	7	0.756	0.869
<b>Fourth</b>	Focus strategy.	7	0.813	0.902
<b>Total grade of all axes</b>		<b>34</b>	<b>0.925</b>	<b>0.962</b>

Source: The researcher's preparation based on resolution data, 2021.

It is clear from the previous table that the coefficients of Alpha Kronbach range from 0.815-0.756, while the transactions of honesty ranged from 0.869-0.903, which indicates that the resolution enjoys consistency and honesty, so that the researchers have confirmed the stability and credibility of the questionnaire, thus making them fully confident in the validity of the questionnaire and its validity to analyze the results, and to answer the study's questions and test its hypotheses.

**Sixth: Results of the field study:**

**A- Descriptive statistics of the personal information of the sample:**

Table 8 shows the personal characteristics of the research sample in terms of scientific qualification, specialization, job title, and years of experience:

**Table (8):** shows the distribution of the sample according to their personal variables

Statement	Iteration	Percentage %	
<b>Scientific qualification</b>	<b>Bachelor</b>	12	24.5
	<b>Master</b>	32	65.3
	<b>Doctor</b>	5	10.2
<b>Total</b>	<b>49</b>	<b>100.0</b>	
<b>Job title</b>	<b>General Manager</b>	8	16.3
	<b>Financial Director</b>	28	57.1
	<b>Managing Director</b>	13	26.5
<b>Total</b>	<b>49</b>	<b>100.0</b>	
<b>Years of experience</b>	<b>Less than 5 years</b>	11	22.4
	<b>5 to under 15 years</b>	27	55.1
	<b>15 years or older.</b>	11	22.4
	<b>Total</b>	<b>49</b>	<b>100.0</b>

It is clear from the previous table that:

- The study community is represented by general managers, finances and administrators, and is directly related to the nature of the use of big data in the industrial companies listed on the Palestine Stock Exchange, making the society suitable for study.
- The scientific qualifications of members of the community range from bachelor's, master, and doctor, and the research community has great career experience in their work, making the research community representative of all practical qualifications and appropriate experiences.
- Years of working experience for community members are less than 5 years, 5 years to less than 15 years, 15 years of age and older, and the research community has years of great experience in their work, making the research community experienced to do their job to the fullest.

#### 4. Statistical analysis of the results of the study and testing hypotheses

##### • Analysis and testing of the first hypothesis paragraphs:

(There is an effect of analysis of big data on enhancing the competitive position of the industrial companies listed on the Palestine Stock Exchange), the Test (T) was used to determine the average response score reached the average score of (3) or not in the individuals of the sample, and the results are shown in the following table:

**Table (9):** Results of statistical analysis of the first hypothesis paragraphs

M	Phrases	Arithmetic medium	Standard deviation	Relative weight	T test value	Probability value,(sig)	Order
1	Big data analysis contributes significantly to decision-making and predicting future events.	4.33	0.55	86.53	16.74	0.000	4
2	Big data analysis provides sufficient and accurate information that helps make rational decisions.	4.57	0.61	91.43	17.96	0.000	1
3	The company examines and analyzes big data to benefit from it in the field of marketing or product development and others.	4.18	0.63	83.67	13.05	0.000	7
4	The company analyzes the data on customer movements from buying, selling and so on with great accuracy.	4.02	0.56	80.41	12.79	0.000	12
5	Big data analysis helps increase the company's ability to understand customer behavior more accurately and identify those who need help, determine their orientation or monitor their performance.	4.29	0.74	85.71	12.23	0.000	6
6	All departments in the company benefit from data analysis in the development of better products and services that suit the real consumer behavior.	4.06	0.80	81.22	9.27	0.000	11
7	Big data contributes to increasing performance efficiency and reducing production lost.	4.35	0.63	86.94	14.95	0.000	3
8	Big data allows the company to significantly increase its profits and enhance its competitive position.	4.14	0.76	82.86	10.47	0.000	10
9	Analyzing and processing big data helps provide useful information that can be used to meet customer needs.	4.33	0.92	86.53	10.07	0.000	4
10	Big data analysis helps expand the company's business and achieve faster customer access, saving shorter time to market its products.	4.18	0.60	83.67	13.78	0.000	7
11	Big data analysis increases the value of data through product supervision and quality control.	4.47	0.71	89.39	14.48	0.000	2
12	Expanding the use of big data analysis helps predict and identify risks in a timely manner.	4.18	0.70	83.67	11.88	0.000	7
13	Big data analysis helps the company evaluate its data by developing evaluation methods.	4.02	0.56	80.41	12.79	0.000	12
<b>Total paragraphs</b>		<b>4.24</b>	<b>0.35</b>	<b>84.80</b>	<b>24.94</b>	<b>0.000</b>	<b>-</b>

The above table shows the following:

- a. The result of approval of the first area as the average of the answers in the special paragraphs of the hypothesis ranges from (4.02) to (4.57).
- b. Paragraph (2), which states that "big data analysis provides sufficient and accurate information that helps make rational decisions", has the highest computational average of (4.57) and relative weight

(91.43%), while paragraphs No. 4 states that "the company analyzes The data on customer movements from buying, selling, and so on with great accuracy," paragraph 13, which states that "big data analysis helps the company to evaluate its data by developing valuation methods", has obtained the lowest computational average of (4.02) and relative weight (80.41%).

c. The arithmetic average for all the hypothesis paragraphs (4.24) and a relative weight of 84.80.

**The result of the hypothesis test:** From the above it can be concluded that (T) is less scheduled than (T) calculated, which means rejecting the nihilistic hypothesis and accepting the alternative hypothesis that "there is an effect of big data analysis on enhancing the competitive position of the industrial companies listed on the Palestine Stock Exchange".

The researchers believe that the current research is consistent with the results of the study of each (Ramadan, et al, 2020), (Lukić, 2017), Rahman, 2017() there is an effect of analysis of big data on enhancing the competitive position of companies, but differ sour with the results of the study of Both (Aneato, 2020), (Mikalefa, et al, 2020), (Kubina, Varmus, 2015).

• **Analysis of the test of the second hypothesis paragraphs:**

(there is an impact of the analysis of big data on the cost leadership strategy of the industrial companies listed on the Palestine Stock Exchange), the test (T) was used to determine the average response score has reached the average score of (3) or not in the individuals of the sample, and the results are shown in the following table:

**Table (10):** Results of statistical analysis of the second hypothesis paragraphs

M	Phrases	Arithmetic medium	Standard deviation	Relative weight	T test value	Probability value(.sig)	Order
1	Big data analysis helps reduce the cost of products.	3.82	0.78	76.33	7.31	0.000	7
2	Big data analysis helps improve competition by delivering products at a reasonable price and at high-quality.	4.04	0.68	80.82	10.78	0.000	3
3	Big data analysis helps reduce time, design and develop new products to achieve competition.	4.12	0.48	82.45	16.22	0.000	1
4	Big data analysis enhances efficiency for operational activities, resulting in increased revenue and added value to the company.	3.86	0.82	77.14	7.35	0.000	6
5	Big Data Analytics helps the company gain competitive information about production, manufacturing, finance, marketing, finance, sales, etc.	4.00	0.76	80.00	9.17	0.000	5
6	The company builds a cost-driving strategy by using big data analytics for high efficiency and at lower cost.	4.04	0.68	80.82	10.78	0.000	3
7	Big data analysis helps estimate a company's market share by determining sales volume to maintain the same level of profitability or perhaps higher levels of profitability.	4.12	0.67	82.45	11.80	0.000	1
<b>Total paragraphs</b>		<b>4.00</b>	<b>0.48</b>	<b>80.00</b>	<b>14.48</b>	<b>0.000</b>	<b>-</b>

The above table shows the following:

- The result of approval of the first area as the average of the answers in the special paragraphs of the hypothesis ranges from (3.86) to (4.12).
- Paragraph sup allow (3) which states that "big data analysis helps reduce time, design and develop new products to achieve competition", and paragraph (7) which states that "big data analysis helps estimate the company's market share by determining the volume of sales to maintain the same level of profits or perhaps higher levels of profits" has obtained the highest computational average of (4.12), the relative weight (82.45%), while paragraph (4) which states that "big data analysis enhances efficiency for operational activities, resulting in increased revenue and added value to the company" has the lowest computational average of (3.86%) and relative weight (77.14%).
- The arithmetic average for all the hypothesis paragraphs (4.00) and a relative weight of 80.00.

**The result of the hypothesis test:** From the above it can be concluded that (T) is less scheduled than the calculated (T) calculated, which means rejecting the nihilistic hypothesis and accepting the alternative hypothesis that "there is an impact of big data analysis on the cost leadership strategy of the industrial companies listed on the Palestine Stock Exchange".

The researchers consider the results of the hypothesis test that the current research is not consistent with the results of previous studies, but differ sour with the results of the study of Ramadan, et al, 2020), Lukić,2017, (Rahman, 2017), (Aneato,2020), (Mikalefa, et al, 2020), (Kubina, Varmus, 2015).



• **Analysis and testing of the paragraphs of the third hypothesis:**

(there is an effect of analysis of big data on the strategy of excellence of industrial companies listed on the Palestine Stock Exchange), the test (T) was used to determine the average degree of response has reached the average degree which is (3) or not in the individuals of the sample, and the results are shown in the following table:

**Table (11):** Results of statistical analysis of the third hypothesis paragraphs

M	Phrases	Arithmetic medium	Standard deviation	Relative weight	T test value	Probability value(sig)	Order
1	The use of big data gives the company a strong competitive advantage if you take advantage of it and analyze it.	4.29	0.76	85.71	11.78	0.000	1
2	Big data analysis leads the company to identify its competitors, characteristics and capabilities, thereby identifying the target markets.	4.24	0.52	84.90	16.71	0.000	2
3	Big data analysis helps the company to ensure that the price of its premium and high-quality products should not be much higher compared to competing products.	4.02	0.80	80.41	8.89	0.000	4
4	Big data analysis enhances the ability to identify the difficulties a company may face to adjust customer privacy.	3.84	0.85	76.73	6.89	0.000	7
5	Big data analysis helps the company rely on its own capabilities and skills that are difficult for competitors to imitate.	3.94	0.75	78.78	8.79	0.000	5
6	Big data analysis contributes to setting its goals, and the quality of its customers, to help survive, grow and sustain ability in a strong competition market.	4.18	0.70	83.67	11.88	0.000	3
7	Big Data Analysis helps excellence in excellence and technical creativity by providing additional services to customers.	3.86	0.50	77.14	12.00	0.000	6
<b>Total paragraphs</b>		<b>4.05</b>	<b>0.45</b>	<b>81.05</b>	<b>16.32</b>	<b>0.001</b>	<b>-</b>

The above table shows the following:

- The result of approval of the third area as the average of the answers in the paragraphs of the hypothesis ranges from (3.84) to (4.29).
- Paragraph (1) which states that "the use of big data gives the company a strong competitive advantage if you take advantage of it and analyze it", has the highest computational average of (4.29) and relative weight (85.71%), while paragraph (4) which states "Big Data Analysis enhances the ability to identify difficulties that the company may face to control customer privacy" has obtained the lowest computational average of (3.84%) and relative weight (76.73%).
- The arithmetic average for all the hypothesis paragraphs (4.05) and a relative weight of 81.05.

**The result of the hypothesis test:** From the above it can be concluded that (T) is less scheduled than (T) calculated, which means rejecting the nihilistic hypothesis and accepting the alternative hypothesis that "there is an impact of the analysis of big data on the strategy of excellence of the industrial companies listed on the Palestine Stock Exchange".

The researchers consider the results of the hypothesis test that the current research is not consistent with the results of previous studies, but differ sour with the results of the study of Ramadan, et al, 2020), Lukić,2017, (Rahman, 2017), (Aneato,2020), (Mikalefa, et al, 2020), (Kubina, Varmus, 2015).

• **Analysis and testing of the paragraphs of the fourth hypothesis:**

(there is an effect of analysis of big data on the focus strategy of the industrial companies listed on the Palestine Stock Exchange),the test (T) was used to determine the average degree of response has reached the average degree which is (3) or not in the individuals of the sample, and the results are shown in the following table:

**Table (12):** Results of statistical analysis of the fourth hypothesis paragraphs

M	Phrases	Arithmetic medium	Standard deviation	Relative weight	T test value	Probability value(sig)	Order
1	Big data analysis can achieve a deeper understanding of customers and their behavior and meet their needs	4.27	0.53	85.31	16.67	0.000	2
2	Big data analysis helps focus on data analysis and evaluation of a company's marketing performance	4.08	0.70	81.63	10.78	0.000	5
3	Big data analysis increases efficiency and profitability and strengthens various marketing campaigns and promotion activities	3.98	0.63	79.59	10.90	0.000	6
4	Big Data Analysis focuses on developing strategic plans to build a significant competitive strength for the company	4.35	0.60	86.94	15.80	0.000	1
5	Big Data Analysis helps the company meet the requirements of a certain group of customers, gaining their loyalty, and thus make a need for competitors to enter with alternative products	4.16	0.72	83.27	11.35	0.000	3
6	Big data analysis increases the company's innovation and innovation capacity to focus on a specific type of product and be more competitive.	3.98	0.63	79.59	10.90	0.000	6
7	Big data analysis helps the company study the possibility of future expansion, market requirements, and discover other market segments.	4.16	0.80	83.27	10.18	0.000	3
<b>Total paragraphs</b>		<b>4.14</b>	<b>0.46</b>	<b>82.80</b>	<b>17.54</b>	<b>0.000</b>	<b>-</b>

The above table shows the following:

- The result of approval of the fourth area, where the average answers in the paragraphs of the hypothesis range from (3.98) to (4.35).
- Paragraph (4) which states that "big data analysis contributes to the focus on strategic plans to build a significant competitive force for the company" has the highest computational average of (4.35) and relative weight (86.94%), while paragraph 3 states that "the analysis of big data increases Efficiency, profit, strengthening of various marketing campaigns and promotion activities," paragraph (6) states that "big data analysis increases the company's innovation capacity to focus on a specific type of product and be more competitive" and has the lowest average arithmetic (3.98) and relative weight (79.59%).
- The arithmetic average for all the hypothesis paragraphs (4.14) and a relative weight of 82.80.

**The result of the hypothesis test:** From the above it can be concluded that (T) is less scheduled than the calculated (T) calculated, which means rejecting the nihilistic hypothesis and accepting the alternative hypothesis that "there is an impact of big data analysis on the focus strategy of the industrial companies listed on the Palestine Stock Exchange".

The researchers consider the results of the hypothesis test that the current research is not consistent with the results of previous studies, but differ sour with the results of the study of Ramadan, et al, (2020), Lukić,2017, (Rahman, 2017), (Aneato,2020), (Mikalefa, et al, 2020), (Kubina, Varmus, 2015).

**Regression analysis of the measurement of the study variables:**

**1. Regression analysis of the first child variable: (Cost Driving Strategy).**

**Table (13):** Regression analysis of the variable of the "Cost Driving Strategy"

Independent variables	Regression coefficients	Regression R	Selection Factor R2	Value t	Probability value sig.	Indication level at (0.05)
Hard	0.579			0.837	0.407	
Cost leadership strategy	0.336	0.579	0.398	4.872	0.000	Slab
<b>ANOVA Contrast Analysis</b>						
<b>F test value</b>	<b>23.738</b>	R-2		0.321	Probability value	0.000

**\* Variable-dependent D-cost driving strategy at 0.05 indicative level**

To determine the impact of the big data analysis on the cost strategy, regression analysis was carried out, and the previous table shows that the adjusted selection factor = 0.321, meaning that the cost driving strategy (dependent variable) was explained by the change in the analysis of large data (independent variable). The

probability value (Sig.) Below the 0.05 ≥ indication level α this indicates that there is an impact of big data analysis on the cost driving strategy according to the following regression equation:

$$Y - 0.579 + 0.336X_1$$

This means that big data analysis affects the dependent variable (cost driving strategy) by 33.6%.

2. Regression analysis of the second child variable:(Strategy of Excellence).

Table (14): Regression Analysis of the Variable of the "Strategy of Excellence"

Independent variables	Regression coefficients	Link R	Selection coefficient		Value t	Probability value	Indication level at (0.05)
			R2				
Hard	0.683				0.507	0.615	
The reviewer checks the procedures established by the administration to ensure that subsequent events are identified, adequate and accurate so that they can be relied upon.	0.466	0.683		0.333	6.407	0.000	Slab
ANOVA Contrast Analysis							
F test value	41.055	R-2			0.455	Probability value	0.000

\* Variable Affiliate Strategy Excellence D at 0.05

To determine the impact of the big data analysis on the strategy of excellence, regression analysis was carried out, and the previous table shows that the adjusted selection factor = 0.455, meaning that the change in the strategy of excellence so reliable (the dependent variable) was explained by the change in the analysis of big data (independent variable). Below the 0.05 level of significance ≥ α this indicates that the impact of big data analysis on the strategy of excellence is so that it can be relied upon according to the following regression equation:

$$\text{And } 0.683 + 0.0.466X_3$$

This means that big data analysis affects the dependent variable (Strategy of Excellence) by 46.6%.

3. Regression analysis of the third child variable: (Focus Strategy).

Table (15): Regression analysis of the variable of the "Focus Strategy"

Independent variables	Regression coefficients	Link R	Selection coefficient		Value t	Probability value	Indication level at (0.05)
			R2				
Hard	0.789				-0.469	0.641	
The auditor determines the extent to which the financial statements need to be adjusted and how the administration intends to address them in the financial statements if necessary.	0.623	0.789		0.683	8.811	0.000	Slab
ANOVA Contrast Analysis							
F test value	77.626	R-2			0.615	Probability value	0.000

\* Variable dependent D focus strategy at 0.05 indicative level

To determine the impact of the big data analysis on the focus strategy, regression analysis was carried out, and the previous table shows that the adjusted selection factor =0.615 means that the change in the focus strategy (dependent variable) was explained by the change in the analysis of big data (independent variable). Below the 0.05 level of significance ≥ α this indicates that there is an impact of big data analysis on the focus strategy.

$$\text{And } 0.789 + 0.0.623X_3$$

This means that big data analysis affects the dependent variable (focus strategy) by 62.3%.

5. Conclusion

The study aimed as a head of the statement of the impact of big data analysis (Big Data) on supporting the competitive advantage of industrial companies listed on the Palestine Stock Exchange, and based on the results of data analysis and testing hypotheses, the study reached a set of conclusions and conclusions, the most important of which are:

There is a significant impact on the competitiveness of the industrial companies listed on the Palestine Stock Exchange with an average swallowed account (4.24) and a relative weight of (84.80), and that the analysis of big data contributes to increase performance efficiency and reduce loss of production, increase the value of data

through supervision and quality control of products, and the analysis and processing of big data helps to provide useful information that can be used to provide the needs of customers more accurately and determine the accuracy of the discerning and those who need to be assisted or their attitudes.

There is a significant impact on the cost leadership strategy of industrial companies listed on the Palestine Stock Exchange with a mathematical average of (4.00) and a relative weight of (80.00), and that the analysis of big data helps to reduce the cost of products, reduce time, design and develop new products to achieve competition, and companies build a strategy to drive the cost by using big data analytics to achieve high efficiency and at a lower cost, and help estimate the company's market share by determining the volume of sales to maintain the same level of profits or perhaps higher levels of profits.

There is a significant impact of big data analysis on the strategy of excellence for industrial companies listed on the Palestine Stock Exchange with an average account of (4.05) and a relative weight of (81.05), and that the use of big data gives companies a strong competitive advantage if well utilized and analyzed, and analysis of big data leads to Companies identify their competitors, their characteristics and their potential, thus identifying the target markets, identifying their objectives, and the quality of their customers, to help stay, grow and sustain in a strong competition market, and ensure that the price of their premium products and high quality should not be much higher compared to competing products.

There is a significant impact on the focus strategy of the industrial companies listed on the Palestine Stock Exchange with a mathematical average of (4.14) and a relative weight of (82.80), and that the analysis of big data contributes to the focus on strategic plans to build a significant competitive power for companies, thus achieving a deeper understanding of customers Their behavior, meeting their needs, gaining their loyalty, thus creating a need for competitors to enter with alternative products, and analysis of big data helps companies study the possibility of future expansion and know market requirements, discover other market sectors, increase efficiency and profit ability and strengthen marketing campaigns and various promotion activities.

In light of the objectives of the study and the nature of the problem and its findings and conclusions, the most important recommendations can be identified, namely that the industrial companies listed on the Palestine Stock Exchange work on the analysis of big data to support and enhance the ability of investors to make decisions by improving the quality of the data obtained, and you need to have correct information regarding customers, products and the environment surrounding the company in the fastest and least time to reach the competitive advantage that can be provided by the analysis of big data, as should the industrial companies listed on the Palestine Stock Exchange. It places great importance on big data analysis because it allows for greater transparency of information within these companies, and allows for a broader, deeper and more accurate view, thereby improving the decision-making process, and delivering more accurate products and services to customers.

It is also necessary for companies to perform big data analytics to achieve product uniqueness through innovation or customization, identifying unique innovative features and customer preferences is essentially an exploratory activity, and companies that focus heavily on the strategy of excellence should rely more on the functions of big data analytics because of the high uncertainty in information, and companies should focus on big data analysis because they play a major role in providing appropriate data to beneficiaries, arranging them and classifying them in the categories of beneficiaries to help them make the most of them. These companies must have specialized professional staff who are able to deal with the huge amount of information sources that provide big data.

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