

The Impact of the Strategic Vision on Business Intelligence in Pharmaceutical Companies: (An Applied Study on Pharmaceutical Industries Companies in Jordan)

Elham Mohammad Alhiary

*Salt College for Humanitarian Sciences, Department of Financial and Administrative Sciences,
Al-Balqa Applied University, Jordan.*

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Abstract: A growing concern and importance among the current studies in the field of strategic management trigger this study to examine the effect of the strategic vision on business intelligence. By adopting a quantitative study approach using a survey questionnaire, the study conducted this research and collected the data from the target sample of the employees working in the pharmaceutical companies in Jordan using a random sampling method. Statistical analyses using SPSS software like Pearson correlation and regression were performed to analyze the data. The results revealed that all dimensions of strategic vision (objectives, organization's mission, and organization's vision) had a statistically significant impact on business intelligence dimensions (data collection, reports preparation, and information transmission). Also the results showed a positive relationship between these variables. The study findings contribute to the current knowledge associated with this topic through the meaningful implications that help in understanding the importance of strategic vision for the companies to adopt and activate the concept of business intelligence. The increasing in the importance of strategic vision particularly during the crisis time e.g COVID-19 encourages the businesses to integrate new integrative business methods for sustainable development.

Keywords: strategic vision, business intelligence, pharmaceutical companies.

1. Introduction

Business intelligence (BI) is a modern concept that has emerged in the business world (Talaoui & Kohtamäki, 2020), it has been addressed through some important theories, methodologies, and mechanisms which describe it as a method used to transform the raw data to meaningful information for the purpose of business analysis (Lim & Teoh, 2020). The methods and techniques of the business intelligence are distinguished by the ability to deal with data and tremendous input (Cavallo et al, 2020) to

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help the organizations to organize, arrange, and store it when needed (Hellström & Ramberg, 2019), also it used to develop the opportunities and implement the effective strategies as well make the right decisions (Li et al, 2019).The key goal of business intelligence is to support decision-makers and analyze and interpret the different types of data to access information which could help in finding and investing the opportunities and implement effective strategies that achieve competitive advantages to directly contribute to the growth and greater market position for the companies(Wamba-Taguimdje et al., 2020).The strategic vision is considered one of the contemporary administrative concepts which the goals can be expressed in clear and precise terms that define the face of the organization future(Kitsios & Kamariotou, 2019).As the strategic vision is transformed into an applied reality through a strategic plan based on the time division of goals and their distribution in implementation processes characterized by flexibility and the ability to adapt with the changes (Fiset & Robinson, 2020). Moreover, the rapid development and increasing in the competitiveness among companies pursue them to focus on creation a strategic vision in line with the aspiration adopted by the employers (Bibee & Isaak, 2021) and to determine how the company's future will be compared to the current situation by defining the goals and achieving them from the first moment of strategic vision formulation (Kieran et al., 2020). Further, this should form a framework that consists of organizational goals and directs the activities and operations towards achieving these goals (Cheung & Yu, 2020), where the function of the strategic vision is to create a long-term focus that represents a source of continuity for the company and directs it towards the future (Abu-Rahma & Jaleel, 2017), and the strategic vision differs according to the nature of the company, its requirements, and the level of development has reached.

The strategic vision plays a vital role in business intelligence, as it mainly contributes to layout the perceptions that the future business might looks like (Todorov & Akbar, 2018), and the development and improvement nature can be added and develop them that could constitute new revolution events in the business world (Santos et al., 2017).

The study problem comes from the problems are facing the pharmaceutical companies in the development of business intelligence technologies because the result of the tremendous technical revolution resulting from the rapid changes in the requirements and desires of society, accordingly the strategic vision for companies is devised based on development in business intelligence, so the study aims to examine the impact of the strategic vision on the intelligence business in pharmaceutical industries companies in Jordan. In addition, the study problem can be formulated to address the following questions:

What is the level of the business intelligence implemented in the pharmaceutical companies in Jordan?

What is the impact of the strategy on the business intelligence of pharmaceutical companies in Jordan?

The study takes its scientific importance from the importance of business intelligence topic as it is considered one of the modern concepts in the implementation of activities and operations of the companies, and it provides the top management with the necessary information and data related to the strategic vision as well the applications and techniques of different business intelligence in the companies which stimulates their higher management to focus on business intelligence through its strategic vision. Also this study was also conducted during the during COVID-19 pandemic, which this situation increase the importance of using technology and electronic means, especially with regard to the information and communication systems in the companies.

1.1 Study Objectives

The study pursues to investigate the impact of the strategic vision on business intelligence of pharmaceutical companies through:

1. Identify the business intelligence level of the pharmaceutical companies in Jordan?
2. Investigate the impact of the strategic vision on the business intelligence for pharmaceutical companies?

2. Literature Review & Hypothesis Development

Lim and Teoh, (2020) recognized the strategic importance of business intelligence usage. Thus, the study addressed the strategies impact on business intelligence such as a strategic resources which mainly influence the sustainability of the businesses of public listed firms listed in Malaysia Stock Market, the study also contribute to the current management knowledge of the business management through the insights associated with the vital role of adopting of business intelligence and its strategic effect on the sustainability. The study adopted descriptive study method with utilized the survey approach as an instrument to collect data, SPSS statistical package was also used to analyze the data and offered the results, and the results revealed that the business intelligence developed the economic performance, and strengthened the environmental performance, as well improved the social performance towards effectively accomplishing the business sustainability in the a more competitive business environment. The study recommended the necessity to pay more attention and focus on the business intelligence as a strategic requirement for competitive edge.

Hellström and Ramberg (2019) examined the perceptions of senior levels of the management in the local government associated with the need to integrate business intelligence and the perceptions about the ability of the organizations to effectively manage the business intelligence. The study used a survey to collect these perceptions from the local governments in Sweden and how the business intelligence adoption develop the whole business, the response rate of the study was around 50%. Also, interviews were conducted to collect data using semi-structured interview. The research study showed that the most prominent of adaptation business intelligence as a method used generally in the private sector to provide modern perspectives to the management and leaders regarding the need for this important factor which help the companies to identify the aspects which affect the complexity and volatility of the business governments.

In their study, Talaoui and Kohtamäki, (2020) demonstrated the contributions of business intelligence during the past three decades and provided an integrative framework, as it relied on the historical approach. This study covered 120 articles spanning over 35 years of studies that have been published in top ranked journals. The study included a set of dimensions, which are the environmental precedents; organizational precedents administrative and individual precedents. They showed that the business intelligence enhanced the strategic performance of the companies and assisted in decision making. The study found a set of results, highlighting that managers prefer to preserve the confidentiality of the ineffective business intelligence unit rather than opening it for evaluation. It recommended various suggestions; the most important is the need to highlight the value that encourages the managers to conduct longitudinal research in the business intelligence area to investigate the modern implementations of the intelligence across cultural differences in the organizations.

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The business strategy modeling based in the enterprise architecture (Kitsios and Kamariotou, 2019) investigated the impact of the business strategies on organizing, planning and making better decisions by evaluating the contemporary problems in the current modeling frameworks related to improving business strategy concepts and identifying areas for improvement. The study showed the consequences of losing the business strategy. A three-stage literature review proposed by Webster and Watson (2002) used tools and models for the purpose of collecting data. The study provided prominent results which existence a model of business strategy. The necessity to develop a comprehensive approach to business strategies.

Fiset and Robinson(2020) developed a new foresight by evaluate the vision statements. The study aimed to clarify the future vision to develop insights during the development of the organizational vision, as the study relied on the experimental approach, and the dramatic personality development strategies were used to formulate the vision statements, and the exercise was used in three different work cycles (n = 87), where it was well received. The exercise content was adaptable to different types of training courses which the organizational visions are substantial topics, like (organizational behavior, strategy and leadership). The study provided some results; the most substantial is the existence of a future organizational vision. The most prominent recommendation was the need to work on developing the future vision continuously.

2.1 Hypothesis of Study

The first main hypothesis H01: the strategic vision dimensions (objectives, organization's mission, organization's vision) have no statistical significant effect at the significance level of ($\alpha \leq 0.05$) on the business intelligence dimensions (data collection, reports preparing, and information transmission) in the pharmaceutical companies in Jordan.

To test this hypothesis, it was divided into the following sub-hypotheses:

H01-1: the strategic vision dimensions have no statistical significant impact on data collection in the pharmaceutical companies in Jordan.

H01-2: the strategic vision dimensions have no statistical significant impact on reports preparing in the pharmaceutical companies in Jordan.

H01-3: the strategic vision dimensions have no statistical significant impact on information transmission in the pharmaceutical companies in Jordan.

2.2 Strategic Vision

The strategic vision is the path map that companies follow to challenge their future (Kitsios & Kamariotou, 2019), as it provides the necessary quantity and type of public perception about the technologies and the necessary resources that the company must follow to maintain its sustainability and stability in the competitive environment (Fiset & Robinson, 2020).The nature of development that can occur in the path of the company and the type of operations, activities and tasks that must be followed to achieve that vision (Bibee et al., 2021), as companies have set out to form a strategic vision for their business until their plan sets the subject, (Cheung & Yu, 2020). And it seeks to achieve it in the long term in a dynamic and advanced manner (Abu-Rahma & Jaleel, 2017). Through the strategic vision, the top management in the company can direct the individuals towards managing the daily operations and facing the challenges and

problems that appear at work and tackle them in a way that achieve the efficiency and effectiveness of the company (Kieran et al., 2020). The strategic vision includes directing the energies of the individuals properly, diagnosing the appropriate work environment and working on its development to bring and attract more opportunities in the environment businesses (Todorov & Akbar, 2018). The adoption of a strategic vision in companies requires from the senior management tube experienced and has a high degree of critical thinking and awareness, (Allison, 2019), and this requires joining some training programs (Bunduchi & Pagliari, 2019), with the aim of developing capabilities and raising capabilities to develop skills, where the strategic vision of the companies is characterized by being sufficient to describe the future of the company (Fiset & Robinson, 2020), and to express the aspirations of the stakeholders and to be clear, on which efforts and resources can be focused without hesitation, (Rothberg & Erickson, 2017), It must be flexible, general, dynamic and applicable in order to be a catalyst for all levels of management, (Betz, 2017).

The strategic vision is defined as the complete conception of what the company will be in the future (Abu-Rahma & Jaleel, 2017), it is the "future path of the company that determines the destination want to reach and the desired position to achieve," (Todorov & Akbar, 2018).

The independent variable consists of a set of dimensions, namely:

Objectives: are the tasks that the organization aims to accomplish and obtain or benefit from, and they are directly related to the mission and strategic vision of the company (Santos et al, 2017).

Organization's Mission: is the essential framework that distinguishes the company from other companies in terms of its industry, products, customers and markets, (Kieran et al., 2020), and it reflects the real reason for the existence of the company (Kitsios & Kamariotou, 2019), it is the framework that reflects the core of the company, which represents the group of unique characteristics of the company that distinguish it from other companies, (Shujahat, 2017).

Organization's Vision: is the future description that the company aspires to achieve (Bibee et al., 2021), and it is the future state that the company seeks to reach (Bunduchi & Pagliari, 2019).

2.3 Business Intelligence

The current technological and economic development pose important challenges for modern companies (Talaoui & Kohtamäki, 2020), especially in light of the increase in competition (Competition), complexity, diversity and difference of customers' desires and demands (Lim & Teoh, 2020), and the rapid and increasing change. (Changes) or the so-called Four Cs (Mariani & eta, 2018), which made companies think of adopting integrated and coordinated systems to face these challenges, to respond to the various aspirations of the parties involved with them (Stakeholders) (Hellström & Ramberg, 2019), and this is not only by adopting activated and entrenched systems for the concept of business intelligence (Wamba-Taguimdje et al., 2020), business intelligence is considered a package of modern technologies such as data warehouse, real-time analytical processing, and data mining, which are used to process and analyze structural data (Li et al., 2019).

The term business intelligence appeared in the late 1980s by the Gartner Foundation, and it was used as a synonym for decision support system (DSS), analysis, and data warehouse (Eidizadeh et al., 2017), and business intelligence was defined as action directed towards the users who access and explore the

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information, and then analyzes it (Hellström & Ramberg, 2019), and develop its understanding method, which lead to improve the way that the decisions are made (Ye & Ma, 2017), and it has become an essential element in the information technology sector. Now business intelligence has become a clear and more mature definition and it has better understandable applications that can be worked on. (Wamba-Taguimdje et al., 2020), but the modern concept of this term differs radically from the old one, since it is related to recent changes and the trend towards globalization and corporate governance, in addition to the impact of the economic aspect on it (Talaoui & Kohtamäki, 2020).

“Business intelligence in the modern era can be defined as the process of employing information technology tools in extracting accurate, valuable and high-quality information related to the field of work itself (Talaoui & Kohtamäki, 2020). The experiences gained to enhance and develop the quality of decisions that must be made based on this information obtained (Suša et al., 2020; Li et al., 2019), where this information is organized and stored in an easy-to-access manner (Ahmadi et al., 2020), processed, retrieved and presented using many technologies such as reports and data mining tools (Rane & Bhandarkar, 2019). Finally, the results of the application of these technologies can be used to improve the processes at work, and business intelligence is an important tool in developing the use of information technology in economic companies (Lim & Teoh, 2020), especially in relation to the process of planning operational, tactical, and financial policies to support and activate the decision-making process (Talaou & Kohtamäki, 2020).

The main goal of business intelligence in companies can be determined to make a better decision-support mechanism through the usage of multiple types and variety of information management systems (Hellström & Ramberg, 2019), with its software, applications and technology to collect data, store and analyze it, and get it when needed (Nyanga & Chatibura, 2019), in order to achieve the use of accurate and timely information, the business intelligence systems include various sub-administrative and specialized systems in the company, such as financial intelligence systems, intelligence systems directed to human resources (Ratia & Helander, 2018), marketing intelligence systems, and competitive intelligence systems, decision support activities, information search activities (Yiu et al., 2020), enterprise economic performance management, benchmarking, foresight and statistical analysis, forecasting, as well dashboard support activities (Balanced Scorecard) all of which work towards improving the company's performance in all its various aspects (Ramberg, 2019).

The main function of the business intelligence is to facilitate and allow control of modern technology to non-specialists, especially managers and decision-makers in the organization (Hellström & Ramberg, 2019). And statistical and analytical treatment of it (Wamba- Taguimdje et al., 2020), in a way that save time, and helps them to make the right decision according to a correct and accurate path, and this increasing interest in modern technology has led to the need for institutions to adopt more effective business intelligence systems in line with economic developments, (Labonte- Le Moyne et al., 2017) so the organizations in the information technology and informatics sector have developed systems that are compatible with the needs of modern enterprises (Falcã & Ramalho, 2020). Financial, strategic, and marketing, in a way that contributes to control the performance organization, improving its competitiveness and developing its profits (Talaoui & Kohtamäki, 2020). The business intelligence enables the company to understand the

staff needs to maximize its performance. With business intelligence, the organization is able to develop operational efficiency, build profitable relationships with the customers, and provide excellent products (Caseiro & Coelho, 2018).

The business intelligence consists of a set of dimensions as follow:

Data collection: is a process through which data is collected, sorted and classified using the latest technologies that facilitate and support databases, and work on selecting the most appropriate information (Lim & Teoh, 2020), and the most reliable and accurate, based on accurate scientific and statistical methods (Falcão & Ramalho, 2020), at this phase, the systems of business intelligence focus on data collection from different sources e.g internal and external sources available in the company to achieve the favorable goals and support the decision-making process (Hellström & Ramberg, 2019).

Reports preparing: is the process of using information in different, varied and multi-dimensional forms, in the form of reports (Nyanga & Chatibura, 2019), some of which are illustrated in the form of statistical indicators, and a large part of which supports the balanced dashboard of the (future) company (Balanced Scorecard), (Talaoui & Kohtamäki, 2020), especially since this differs from its traditional counterparts in that it includes four basic axes related to financial performance, customers, the path of internal operations (Ahmadi et al., 2020), in addition to organizational attenuation, which makes it need important support from various information provided by the different systems of business intelligence (Yiu et al., 2020).

Information transmission: is a process through which this information is published on the various parts and component sections of the company (Li et al., 2019), as each part uses the information it needs (Suša et al., 2020), and this process is done through a portal called the Enterprise Information Portal (EIP).

Business intelligence is not only an information system, but it is one of the most important knowledge-making systems in companies as it not only provides information (Talaoui & Kohtamäki, 2020), but it sorts and classifies data in several areas and analyzes it to extract what can serve the company in enhancing its strategies, (False et al., 2020), and it can be considered as a group of analytical methods utilized to better understand the capabilities existing within the company, market trends and technology used in the competitive environment of companies (Hellström & Ramberg, 2019), with the aim of providing the necessary information to planners and decision-makers within the company (Lim & Teoh, 2020).

2.4 Conceptual Model

The current research suggests a theoretical study model to examine the role of the strategic vision of companies through adopting activated and entrenched systems for the concept of business intelligence in Jordan. This role results in emerging situations and crises. The study model includes some fundamental factors, where the independent variable is the strategic vision through its dimensions (objectives, organization's mission, organization's vision) impact on the dimensions of business intelligence (data collection, reports preparing, data transmission). The conceptual model for this research is illustrated in Figure 1.

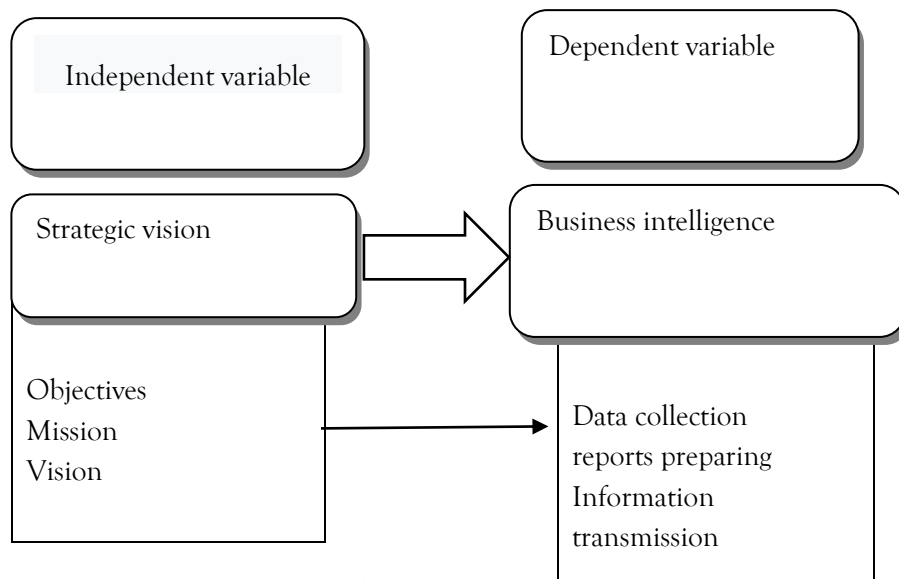


Figure 1. Research Model

3. Method

To analyze the data, Statistical Package for Social Sciences SPSS software was used which includes descriptive analysis of the demographics of the respondent's e.g educational level and current workplace and another section designed to measure the actual experience of the participants regarding developing modern methods during COVID-19 time. Reliability of the factors was also performed to check stability of the items while measure the study constructs, and the regression analysis as the most common appropriate analysis in these studies was applied in the current study to predict the association between the variables of the model developed over this research. A random sampling method was also used to avoid bias in the selection process and ensuring equal opportunities for all objects to participate in this study (Nassiuma, 2001). Seven Likert scale was used to rank the responses for each questionnaire statements rating from strongly disagree to strongly agree to measure the perspectives of the respondents to use the integrated information system in the target organizations. Multiple regressions analysis was run among this study to test the proposed hypotheses and model.

4. Findings & Discussion

The descriptive statistics was also used over the identified variables to the check how far the responses to the mean and the degree in these responses, also the reliability of the measurement using the most common test called Cronbach alpha for this analysis to ensure the ability of the items in measuring the variables. Table 1 presents these results which they mostly achieve acceptable values of the reliability of the measurement scale. The values are greater than 70 % (Hair et al, 2009). Thus, the instrument is highly reliable and valid, and this indicates appropriate factors for further analysis.

Table 1. Reliability of Variables

<i>Variable</i>	<i>Reliability (Cronbach alpha)</i>
Objectives	0.844
Organization's mission	0.901
Organization's vision	0.916
Data collection	0.893
Reports preparation	0.859

Table 2. Mean and Standard Deviation of Variables

<i>Variable</i>	<i>Mean</i>	<i>Standard deviation</i>
Objectives	4.01	0.900
Organization's mission	3.93	0.991
Organization's vision	3.94	0.950
Data collection	3.59	1.101
Reports preparation	3.75	0.976
Information transmission	3.73	0.956

The researcher found that the targeted companies used clear criteria to consider their own plans and objectives and strive to empower their workers and provide them with skills, knowledge and experiences, and set goals and strive to achieve them, where their arithmetic mean (4.01) and standard deviation (0.900), and the relative importance was high, and this indicate the seriousness of the upper management in the pharmaceutical industry to pay attention to the individuals who work for them and develop their capabilities and experiences, as Hellström & Ramberg, (2019) and Eidizadeh et al., (2017) indicated the importance of developing working individuals.

Organization's mission

The researcher found that the pharmaceutical industry put a clear mission that can be translated into clear work programs and connects it with its strategic vision and use it as a criterion for evaluating the business achievement and reviewing it periodically to improve the business, and it encourages its employees to be creative and solve work problems, where the mean is (3.93) and the standard deviation (0.991), and the relative importance was high, and this indicate that the pharmaceutical industry companies were very seriously to put their message in a clear way and this confirms the importance of the clarity of the message in defining the goals of the companies, as (Ramberg, 2019) and (Ahmadi et al., 2020), both emphasized the importance of clarity of the mission.

Organization's vision

The researcher found that pharmaceutical companies had a clear vision that can develop great agreement among their employees on the future vision and the goals of their vision in line with the requirements of society and take perspectives that their employees look at when developing their strategic vision. The

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international level, where its mean (3.94) and the standard deviation (0.950), and the relative importance was high, and this indicate the importance of matching the vision with the requirements of society as it represent the main goal of pharmaceutical companies, as indicated by (Talaoui & Kohtamäki, 2020) and (Lim & Teoh 2020) on the importance of matching the vision with the requirements.

Data collection

The researcher found that the process of all data using the internet improved access to the products of the international companies, which in turn store data and information and improved the quality of their products based on the necessary scientific and technical data and information and are interested in creativity in work sufficiently, as mean is (3.59) and the standard deviation (1.1013), and its relative importance was high, and this indicate the importance of data collection for the development of products, as the pharmaceutical industry companies paid attention to the quality of their products through data collection.(Rothberg& Erickson, 2017) to the importance of data.

Reports preparing

The researcher found that the speed of advanced data analysis help the pharmaceutical industry companies in the community and that it took into account the accuracy of the analysis of the data and this was evidence that it is working with all its energy to collect data and develop the quality of its products accordingly, as its arithmetic mean (3.75) and the standard deviation (0.976) and the relative importance was high, and this indicate the importance of speedy data analysis to develop product quality in light of intense competition between pharmaceutical companies, as Allison,(019) and Fiset & Robinson, (2020) indicated the importance of data analysis.

Information transmission

The researcher found that the pharmaceutical industry companies had the ability to integrate elements of theoretical and applied knowledge to create new products and services and able to discover opportunities and challenges through the proper transfer of information and realized the importance of communication technology for the development of their business, as its arithmetic mean (3.73) and the standard deviation (0.956), and the relative importance was high this indicated the importance of integrating knowledge to reach new products and services through the development of available technology and knowledge of obtaining quality products.

4.1 Sample demographics

Table 3 Description of the study population

<i>Variable</i>	<i>Category</i>	<i>Frequency</i>	<i>Percentage %</i>
	Male	121	%75.6
	Female	39	%24.4
	Total	160	%100
Age	Less than 30 years old	38	%23.8
	From 30 to less than 40	59	%36.9
	From 40 to 50	42	%26.2
	More than 50	21	%13.1
	Total	160	%100
Qualification	High school or less	5	%3.1
	Diploma	12	%7.5
	BA	87	%54.4
	Postgraduate	56	%35.0
	Total	160	%100
Experience	5 years or less	38	%23.8
	From 5 to 10	26	%16.2
	From 10 to 15	37	%23.1
	More than 15	59	%36.9
	Total	160	%100
Job title	Supervisor or Engineers	69	%43.1
	Head of branch	37	%23.1
	heads of departments	17	%10.6
	General manager	37	%23.1
	Total	160	%100

4.2 Correlation Results

The correlations among all relevant variables are presented in Table 4 and which show the correlations between the suggested research variables. The objectives dimension had a significant and positive correlation at a significance level of $\alpha < 0.05$ with organization's mission, organization's vision, data collection, reports preparation and information transmission. Additionally, the organization's mission was positively associated with organization's vision, data collection, reports preparation and information transmission. Moreover, the correlation between organization's vision, data collection, were also significant and positive. The focus on data collection may potentially have a positive impact reports preparation

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through large tendency in this reporting. Regarding the correlations between reports preparation and information transmission as well data collection, the results showed greater positive relationships.

Table 4 Pearson Correlation of the Variables

Variables	1	2	3	4	5	6
Objectives	1.000					
Organization's mission	0.793**	1.000				
Organization's vision	0.667**	0.711**	1.000			
Data collection	0.758**	0.701**	0.605**	1.000		
Reports preparation	0.638**	0.796**	0.762**	0.786**	1.000	
Information transmission	0.621**	0.631**	0.662**	0.755**	0.725**	1.000

Note: N 160; **a<0.01

Table (5) provides the values of Variance Inflation Factor VIF and tolerance of the dimensions of the independent variable (i.e. strategic vision) to check the multicollinearity problem.

Table 5 Multicollinearity Results

Variable	Tolerance	VIF
Objectives	0.355	2.816
Organization's mission	0.179**	5.593
Organization's vision	0.279**	**3.587

Based on results above, the VIF values were greater than 1 and less than 10. In addition, the tolerance values within the range of (0 - 1). Thus, there is no multicollinearity problem among the dimensions of the independent variable (i.e strategic vision).

Durbin-Watson statistical test

Durbin-Watson statistical test was conducted to ensure any autocorrelation problem in the data. Through this test, the tabulated D-W values of a sample (n=160) were compared with the calculated D-W values. The highest tabulated D-W value is abbreviated as (du) and the lowest tabulated D-W value is abbreviated as (dL). In case the calculated D-W value doesn't fall under the range of dL values and du values, there is no autocorrelation problem. Table 6 illustrates the results of the Durbin-Watson test.

Table(6) The Durbin-Watson statistical test

Hypothesis	calculated D-W value	(dL) lowest values	(du) upper values
Ho1	1.917	2.39	2.26
Ho1-1	1.778	1.720	1.747
Ho1-2	1.844	1.720	1.747
Ho1-3	1.981	1.720	1.747

The results showed there was independence of the residual by evaluating the Durbin-Watson statistic, (The Durbin-Watson value ranged from 0 to 4), the calculated D-W values between (1.778- 1.981). Thus, there was no any auto-correlation between Variables. Thus, data can be used to conduct regression analysis.

Hierarchical multiple regression was used in this analysis which allow predicting the variance in a particular dependent variable because of some independent variables. The hierarchical multiple regression enter the predictors into the regression equation in an order to control the effect of covariate on the result and examine the causal effect of independent variables while predicting the dependent variable. The research ran multiple regressions to predict the variance of business intelligence from strategic vision. The results showed there was independence of the residual by evaluating the Durbin-Watson statistic, the results also found no evidence of multicollinearity, as assessed by the Variance Inflation Factor VIF

4.3 Hypotheses Testing

H01: the strategic vision dimensions (objectives, organization’s mission, organization’s vision) have no statistical significant impact at significance level of (α 0.05) on the business intelligence in the pharmaceutical companies in Jordan.

To test this hypothesis, the multiple regression test was used to examine the impact of strategic vision in its dimensions on the level of business intelligence in its combined dimensions, and all that shows in Table (7).

Table 7Main Hypothesis Results

The dependent variable	Model summary			Variance			independent variable dimensions		
	R	R2	DF	value F	Sig F	Variance	value (B)	Value T	Sig
The independent variable	0.853	0.728	3	139.376	0.000	Objectives	0.287	3.441	0.001
			156			Organization's mission	0.244	2.335	0.021
			159			Organization's vision	.254	2.971	0.020

Independent variable (The strategic vision)

Dependent variable (business intelligence)

Based on the obtained results, the calculated T-values were within the range of 2.335 -3.441. Thus, the strategic vision dimensions jointly had a statistically significant impact at significance level of (α ≤0.05) on business intelligence dimensions in pharmaceutical industries companies. The correlation coefficient (R) value between the strategic vision dimensions and (business intelligence was 0.728. The determination coefficient (R²) value between strategic vision dimensions and business intelligence was 0.532. Thus, 53.2% of the changes in the (business intelligence level can be attributed to the strategic vision dimensions. The calculated f value was 139.376 which statistically significant impact at significance level of (α ≤0.05).

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H01-1: the strategic vision dimensions have no statistical significant impact on data collection in the pharmaceutical companies in Jordan.

Testing this hypothesis requires run the simple regression analysis. The results of this analysis are shown in Table 8.

Table. (8) The results of the effect of strategic vision on data collection.

The dependent variable	Model summary			Variance			independent variable dimensions		
	R	R2	DF	value F	Sig F	variance	value (B)	Value T	Sig
The independent variable	0.819	0.671	1	322.234	0.000	strategic vision	1.119	17.951	0.000
			158						
			159						

Independent variable (The strategic vision)

Dependent variable (data collection)

The results of the correlation coefficient (R) value reached between the two variables (strategic vision and data collection) (0.819), and the relationship between the two variables was positive. This explain that the estimated model expressed that the dimension in the independent variable "strategic vision" positively affect the dependent variable "data collection", and the value of the coefficient of determination (R2) was (0.671), which means (67.1%) of the change in data collection can be attributed to strategic vision. The calculated F value was 322.234 which indicate a statistical significant impact at significance level of (α 0.05). Thus, the null hypothesis was rejected and the alternative hypothesis accepted.

H01-2: the strategic vision dimensions have no statistical significant impact on reports preparing in the pharmaceutical companies in Jordan.

Testing this hypothesis requires run the simple regression analysis. The results of this analysis are presented in Table 9.

Table (9) the results of the effect of strategic vision on preparing reports.

The dependent variable	Model summary			Variance			independent variable dimensions		
	R	R2	DF	value F	Sig F	variance	value (B)	Value T	Sig
The independent variable	0.797	0.635	1	275.277	0.000	strategic vision	0.960	16.591	0.000
			158						
			159						

Independent variable strategic vision

Dependent variable preparing reports.

By looking at Table (9), the results showed that the value of the correlation coefficient (R) reached between the two variables (strategic vision and reporting) (0.797), and the relationship between the two variables was positive. This explain that the estimated model expressed that the dimension in the independent variable "strategic vision" positively affect the dependent variable "reporting", and the value of the coefficient of determination (R^2) was (0.635), meaning (63.5%) of the change in the strategic vision and the level of intelligence business, while (F) calculated value reached (275,277) with a statistical significance level (0.000) and it was less than ($\alpha \leq 0.05$),this statistic confirms the regression significance.

Based on the table above, the correlation coefficient (R) value reached between the two variables (strategic vision and reporting) (0.797), and the relationship between the two variables was positive. This explain that the estimated model expressed that the dimension in the independent variable "strategic vision" positively affect the dependent variable " reporting ", and the coefficient of determination (R^2) value was (0.635), which means (63.5%) of the change in reporting can be attributed to strategic vision. The calculated F value was (275,277) which a statistically significant at significance level of ($\alpha \leq 0.05$). Thus, the null hypothesis is rejected and the alternative hypothesis is accepted. That means that strategic vision dimensions have a statistically significant impact on preparing reports in pharmaceutical companies.

H01-3: the strategic vision dimensions have no statistical significant impact on information transmission in the pharmaceutical companies in Jordan.

Testing this hypothesis requires run the simple regression analysis. The results of the last analysis as presented in Table 10.

Table (10) the results of the effect of strategic vision on the information transmission

The dependent variable	Model summary			variance			independent variable dimensions		
	R	R2	DF	value F	Sig F	variance	value (B)	Value T	Sig
The independent variable	0.753a	0.567	1	206.663	0.000	strategic vision	0.915	14.376	0.000
			158						
			159						

Independent variable strategic vision

Dependent variable information transmission

Based on the table above, the correlation coefficient (R) value of the correlation between variables (strategic vision and transmission information) (0.753), Thus, there was a positive relationship between those variables. The determination coefficient (R^2) was (0.567), thus (56.7%) of the changes in the transmission information can be attributed to strategic vision. The calculated F value was (206.663) which had a statistical and significant at significance level of ($\alpha \leq 0.05$). Thus, the null hypothesis rejected, and the alternative hypothesis accepted. That means that the strategic vision dimensions (i.e., objectives, mission, vision) have a statistically significant impact at statistical significance level of ($\alpha \leq 0.05$)-on information transmission in pharmaceutical companies.

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- Based on the obtained results, the present study summarized the discussion as follow:
- Efficient top management of pharmaceutical companies transforms the strategic vision into tangible results based on the business intelligence.
- The speed of advanced data analysis after collecting and reporting help the pharmaceutical industries companies in the community to develop the quality of its products and that meets the requirements of society.
- The accuracy and objectivity of the strategic vision are based on the effectiveness of strategic information systems and affect the success and future growth of the organization.
- The pharmaceutical industrial companies put a clear mission that can be translated into clear work programs and connects it with its strategic vision (objectives) and use it as a criterion for evaluating business achievement and reviewing,
- The process of data collection using the internet improves the product development and design process, and advanced data analysis helps pharmaceutical companies meet all their needs.
- Pharmaceutical companies have the ability to integrate elements of theoretical and applied knowledge into their operations to create new products and services and are able to discover opportunities and challenges through the proper transfer of information and realize the importance of communication.

5. Recommendations

The study recommends the following:

- The need to develop the skills and possibilities insurance plan that the pharmaceutical companies need to set their objectives.
- Paying more attention to the goals of the company's vision in line with the current and future requirements of society
- The need for administrative and technological innovation: product innovation and the creativity of processes at work or job to meet the changing needs of customers according to various environmental changes such as the spread of the Corona virus.
- Technological capabilities are needed in obtaining information, this is evidenced by its adoption of the concept of business intelligence.
- Transfer to the entire e-management.

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