

# The Impact of Strategic Management on the Jordanian Pharmaceutical Manufacturing Organizations' Business Performance

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## Abstract

*The current study aimed at investigating the effect of strategic management by using Balanced Scorecard (BSC elements) on Jordanian Pharmaceutical Manufacturing (JPM) organizations' business performance. To approach the aim of the study, practical data were collected from 13 companies out of 16 companies, by means of a questionnaire. The questionnaire was delivered to about 140 managers out of 250; only 95 questionnaires were completed, out of 95 questionnaires only 90 were suitable for further analysis. Statistical techniques such as descriptive statistics, t-test, ANOVA test, correlation, simple and multiple regressions were employed. To confirm the suitability of data collection instrument, a Kolmogorov-Smirnov (K-S) test, Cronbach's Alpha and factor analysis were used. The result of the study shows there is a significant implementation of the balanced scorecard variables among JPM Organizations, the learning and growth perspective rated highest average, followed by internal processes perspective, then financial perspective and customer perspective, respectively. Result also indicates that there is a high relationship among balanced scorecard variables and between balanced scorecard variables and JPM Organizations' business performance is strong. The result of the simple regression and the multiple regressions analysis shows that strategic management (balanced scorecard elements) has a direct impact on Jordanian Pharmaceutical Manufacturing Organizations' business performance. Finally, the result shows that the customer perspective has the highest effect on JPM organizations' business performance, followed by internal processes perspective, then learning and growth perspective and financial perspective, respectively.*

**Key Words:** *Balanced Scorecard (BSC), Financial Perspective, Customer Perspective, Internal Processes Perspective, Learning and Growth Perspective, Jordanian Pharmaceutical Manufacturing (JPM) organizations, Business Performance.*

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## Introduction

In the globalization era, the strategic management has been considered as the most important practice which distinguishes organizations from each other's. Strategic management is the key process to achieve organizational vision, strategy and objectives. All organizations whatever they are, whatever they do, they should perform a strategic management practices to insure that they fit within their environment. Huynh, et. al. (2013) stated that in today's business environment, business organizations are facing a fierce competition in domestic and global markets. To survive and develop, they must implement strategic management tools in order to increase their competitiveness and get more advantages.

From literature review, it appears that there is neither clear cut definition nor agreement upon strategic management components. Dess, et. al. (2005) defined strategic management as it consists of the analysis, decisions, and actions an organization undertakes in order to create and sustain competitive advantages. That means focusing on the fundamental question: How should organizations compete in order to create competitive advantages in the marketplace? Price (2006) divided the strategic business basic components into vision, mission, values, objectives, and plans. And Mackie (2008) said that strategic management refers to a set of processes comprising strategy formulation, strategy implementation, monitoring and control. The strategic management process is a cyclical and ongoing. Pathak (2009) considered strategic management as a stream of decisions and actions, which leads to the development of an effective strategy or strategies to help achieve corporate objectives in a competitive way. Furthermore, Abu Bakar, et. al. (2011) described strategic management as a concept that concerns with making decisions and taking corrective actions to achieve long term targets and goals of an organization. The importance of strategic management in a firm can be answered by analyzing relationship between strategic management and organizational performance. Moreover, Mahoney (2012) elaborated that strategic management addresses the organizational structure, resources and capabilities, and the strategic positioning of the organization to create, capture, and sustain competitive advantage. In addition, Dudin (2013) explained strategic management as a process in a firm consists of setting the vision, mission and goals, analysis of external and internal business environment, selection of a favorable strategy, strategic planning, and proposals for organizational, administrative changes, setting measures on control systems and strategy implementation, and evaluation of the strategy.

In the current highly competitive market, it is essential to analyze, evaluate and manage the organization's strategy to improve organizations' performance. UNDP (2008) reported that in the absence of quantitative and qualitative follow up on emerging outcomes, informed decision making for strategic management becomes a challenge. The lack of an effective monitoring and evaluation system limits informed strategic management. Pirtea, et. al. (2009) stated strategic management is about the management of the total organization, in order to create the future. There is a very important relationship between strategic planning and performance management. Performance management is really about setting and achieving goals at the employee level, and identifying and fixing barriers related to achieving those goals. Serra and Ferreira (2010) said that the most important area of research in the discipline of strategic management lies in the understanding of performance differentials between firms. Hatif and Sadik (2012) said that the application and use of methods of strategic management by the companies lead to achieve several benefits and features for these companies, which assist it to achieve its goals and objectives and the performance of its functions in the strategic-range. Rhee and Mehra (2013) clarified that the close linkage between competitive strategy and functional strategic activities is asserted to be a precondition to the achievement of optimal business performance.

The debate about strategic management is not limited to its definition and its components, but it extended to how to measure, evaluate and manage it. Different models and methods have been used by different scholars, academicians and practitioners to measure, evaluate and manage strategic management practices and examine its influence on organizations' performance. Newbert (2007) used the resource-based view (RBV) to evaluate and manage strategic management. Ritson (2011) used Porter's five forces model to identify the key environmental forces, and to assess any industry and analyze the three major things: the current situation, the opportunities and the threat. Hin et. al. (2011) and Hin et. al. (2013) used Wheelen and Hunger Strategic Management Model as reference. The model is segmented to four sections: environmental scanning; strategy formulation; strategy implementation; evaluation and control. Arabzad and Shirouyehzad (2012) stated that many approaches and techniques could be used to analyze the strategic issues in the strategic management process. One of these techniques is SWOT analysis which organizations use it to implement its strategic objectives and identify all the factors involved in making decisions. Strengths and weaknesses are assessed by the internal environment; while opportunities and threats are assessed by the external environment. Jalaliyoon, et. al. (2012) used an analytical hierarchical process

(AHP) technique to evaluate and manage strategic management in an automobile company. Gupta (2013) used PEST analysis to evaluate and manage organizations' strategy. PEST analysis stands for Political, Economic, Social, and Technological analysis and describes a framework of macro-environmental factors used in the environmental scanning component of strategic management. A PEST analysis is a business measurement tool which is a useful for understanding market growth or decline, and as such the position, potential and direction for a business.

Finally, Mackie (2008) used Balanced Scorecard for strategic management. Leelakusolvong (2009) mentioned that: Organizational effectiveness is measured by a BSC index of four combinations of financial orientation; customer perspective; internal process and learning & growth. Bavarsad et. al. (2012) used BSC approach for strategic management evaluation, indexes of performance evaluation in four perspectives: financial, customers, internal business processes, and learning and growth. Morard (2013) clarified that: The BSC method offers comprehensive guidance regarding what organizations should focus on to "balance" the financial perspective with other crucial areas.

As mentioned above, different models and methods have been used by different authors to evaluate and manage strategic management and organizations' performance. Since 1996, BSC was one of the most widely used models to measure and manage strategic management and organizations' performance. Mainly it has been used to measure and manage strategic management in production industry, which produce products more than services. Pharmaceutical industry is one of the most important industries worldwide, pharmaceutical organizations use both tangible and non-tangible assets to perform and excel each other. For Jordan pharmaceutical industry is an important industry for Jordan's economy. The pharmaceuticals' exports rose to \$643 million in 2012 from \$503 million in 2011, and it would generate 1 billion US\$ by the end of 2015. Jordanian medicines are exported to around 65 markets (The Jordan Times 2013). 81% of Jordanian production is exported to foreign markets, and 90% of the exports are going to Arab countries (JAPM, 2013), and directly and indirectly employs around 8,000 across pharmaceutical firms and institutions, including manufacturing, research and wholesale (Ayoub and Qadoumi 2007). Therefore, this study is designed to measure, evaluate and manage strategic management elements to improve Jordanian pharmaceutical organizations' business performance. Moreover, this study will use BSC to measure and manage strategic management within Jordanian pharmaceutical industry, as well as, it will use it to study the impact of strategic management on Jordanian pharmaceutical manufacturing organizations' business performance.

### **Problem Statement**

Many authors stated that you have to measure what you would like to manage. Dauda, et. al. (2010) study recommended that investors and managers should make use of strategic management to improve their organizations actual performance at all times. Abu Bakar, et. al. (2011) stated the importance of strategic management in a firm can be answered by analyzing relationship between strategic management and organizational performance. Zeglat, et. al. (2012) pronounced that performance measurement system plays interesting and different roles in the short and long-term of an organization's performance. The two key functions of this concept are measuring and monitoring the progress of performance and achieving strategic objectives. Accordingly, the purpose of this research is to investigate the effect of strategic management elements on Jordanian Pharmaceutical Manufacturing organizations' business performance.

### **Problem Elements**

Based on the research problem mentioned above the study problem can be perceived by having detailed and scientific answers for the following questions:

The main question:

Is there a direct effect of strategic management (balanced scorecard) on Jordanian Pharmaceutical Manufacturing organizations' business performance?

This main question can be divided into the following sub-questions according to strategic management elements as follows:

1. Is there a direct effect of financial perspective on Jordanian Pharmaceutical Manufacturing organizations' business performance?
2. Is there a direct effect of customer perspective on Jordanian Pharmaceutical Manufacturing organizations' business performance?
3. Is there a direct effect of internal processes perspective on Jordanian Pharmaceutical Manufacturing organizations' business performance?
4. Is there a direct effect of learning and growth perspective on Jordanian Pharmaceutical Manufacturing organizations' business performance?

### Study Hypotheses

Based on the above-mentioned questions about the problem statement and its elements, and according to the study model, the following hypotheses can be developed:

Main Hypothesis:

H0: Strategic management (balanced scorecard elements) does not have a direct impact on Jordanian Pharmaceutical Manufacturing Organizations' business performance, at  $\alpha \leq 0.05$ .

This main hypothesis can be divided into the following sub-hypotheses according to the strategic management (balanced scorecard) elements (variables) as follows:

H0.1: Financial Perspective does not have a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

H0.2: Customer perspective does not have a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

H0.3: Internal processes perspective does not have a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

H0.4: Learning and growth perspective does not have a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

### Study Purpose and Objectives

This study investigates the effect of strategic management on the Jordanian Pharmaceutical Manufacturing Organizations' business performance i.e. cause-affect perspective research. For this purpose, the current study attempts to find the impact of balanced scorecard elements (financial, customer, internal processes, and learning and growth) on Jordanian Pharmaceutical Manufacturing Organizations' business performance.

The main objective of this research is to provide sound recommendations about the relationship between strategic management and business performance to pharmaceutical organizations, other industries, decision makers and academicians and to point out critical factors of strategic management and find suitable ways for measuring and managing it.

### Study Importance and Scope:

A better understanding of the effect of strategic management elements on the Jordanian Pharmaceutical Manufacturing Organizations' business performance draws conclusions that can be beneficial not only for

Jordanian Pharmaceutical Manufacturing Organizations, but also to other organizations, institutions and policy makers. The content also may be of an interest to academic studies related to the reporting and decision making concerning strategic management. This study presents the problem at an organizational level, as it is the level of implementing strategies and management.

**Study Model**

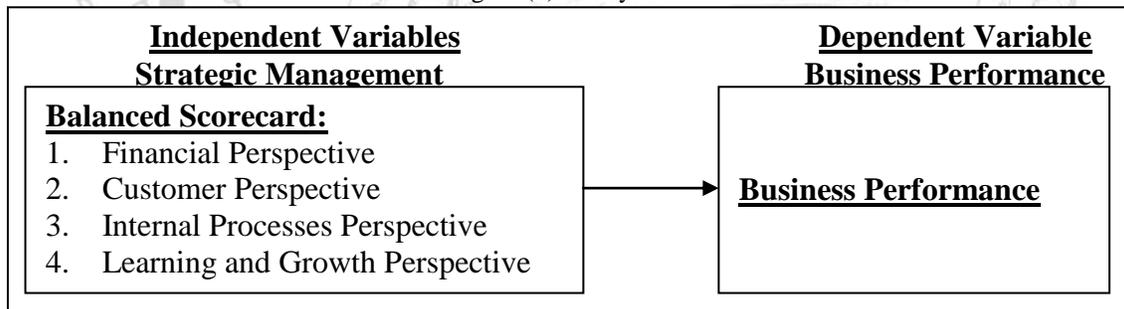
The current study uses Norton and Kaplan BSC. Therefore, current research studies the effect of balanced scorecard variables on Jordanian Pharmaceutical Manufacturing Organizations’ business performance as shown in figure (1):

Balanced scorecard: In the current research balanced scorecard will be used as strategic management tool to measure and manage organizations' performance. It constitute from four perspectives as follows:

1. Financial Perspective: This perspective answers the question regarding how are we looking to our shareholders?
2. Customer Perspective: This perspective answers the question regarding how do our customer see us?
3. Internal Processes Perspective: This perspective answers the question regarding what should we do to satisfy our customers' needs and wants?
4. Learning and Growth Perspective: This perspective is about people and answers the question regarding what do we have to learn and develop in order to satisfy stakeholders' needs and wants?

Business Performance: This variable will answer the question regarding the current and future organizations' business performance?

Figure (1): Study Model



**Litterateur Review**

In this section, due to limited space we will introduce a snapshot summary from selected related literatures. Umar (2005) explored the impact of strategic management as a tool of achieving an effective and efficient merger and acquisition at Nestle and Lever Brothers PLC. The study concluded that: Strategic management played a very important role in the success, growth and survival of the company, particularly where merger was concerned. Singh (2005) examined the impact of strategic planning process variation on superior organizational performance in nonprofit human service organizations providing mental health services. The major finding of this study was that strategic planning is highly correlated with superior organizational performance. Meier, et. al. (2007) was trying to find out if strategy content has an important influence on organizational performance in public organizations in the United Kingdom. The study found that the defender strategy was the most effective for the primary mission of the organization and that the prospector and reactor strategies work best in regard to the goals. Zehir and Ozsahin (2008) investigated the relationship between both organizational and environmental factors with innovation performance in Turkish Large-Scale Firms. The research findings related to the linkage between participation and strategic

decision-making speed indicate that extensive participation increases the pace of decision making and improving performance. Dauda, et. al. (2010) examined the influence of strategic management on corporate performance in selected small scale enterprises in Lagos Metropolis, Nigeria. Findings revealed that strategic management practices enhance both organizational profitability and company market share.

Moghaddam (2012) was trying to find whether the balanced scorecard implementation affect financial performance transparency. Findings indicated that implementation of balanced scorecard can have an influence on both company value and the transparency of financial performance. Arabzad and Shirouyehzad (2012) used strategic management approach (SWOT analysis) to find the critical success factors that affect the success level of a project. Results showed that by using information from SWOT matrix, many project threats and weaknesses are in fact, reversible. Arasa and K'Obonyo (2012) examined the relationship between strategic planning and firm performance. Correlation analysis results indicated the existence of a strong relationship between strategic planning and firm performance. Owolabi and Makinde (2012) studied the effects of strategic planning on corporate performance using Babcock University, Nigeria as the case study. The results of the hypotheses revealed that there was a significant positive correlation between strategic planning and corporate performance. Ridwan and Marti (2012) tried to understand the link between strategic planning practices and performance in the regional government-owned banks in Indonesia. The study findings concluded that the corporate culture and types of decision making influence effective strategic planning.

Luen, et. al. (2013) investigated whether strategic planning affects business performances of these SMEs over the long term in Malaysia. The results confirmed that there was a positive relationship between strategic planning and their business performances. This indicated that manufacturing companies that have some form of strategic planning are more likely to perform better from the four perspectives of the balanced scorecard (BSC), namely, learning and innovation, financial, customer, and internal business processes perspectives. Muogbo (2013) explored the impact of strategic management on organizational growth and development of selected manufacturing firms in Anambra State in Nigerian. Results from the analysis indicated that the adoption of strategic management has significant effect on competitiveness and significant effect on employee's performance and has significantly increased organizational productivity. Fiberesima and Abdul Rani (2013) examined the impact of strategic management on business success in Nigeria. The study concluded that strategic management was found to be positively related to corporate success, and strategic management practices improve business success. Amurle, et. al. (2013) study objective was to establish the effect of strategic planning on the performance of Information and Communication Technology (ICT) SMEs in Kenya. The study results revealed that strategic planning has significant and positive influences on performance of ICT SME's in Kenya. Birinci and Eren (2013) investigated the effect of strategic management processes on the performance of the universities in Turkey. The study concluded that the stages of strategic management process, planning, controlling and flexibility were seen to have a positive effect on performance.

Finally, in Jordan, few studies were carried out to investigate the effect of strategic management on organizations' business performance. Aldehayyat and Twaissi (2011) aimed to identify strategic planning system characteristics in Jordanian small industrial firms and to examine its relationship with corporate performance. The results of the research strongly indicated that there was a positive relationship between strategic planning and financial performance. Al-Qatamin and Al-Qatamin (2012) conducted an assessment of corporate strategic performance in a sample of Jordanian banks. Results indicated that profitability has a weak positive discriminatory effect, while productivity has no statistically significant contribution to strategic performance. Dudin (2013) examined the attitudes of employees in telecom sector in Jordan towards the challenges facing strategic management in Telecom sector in Jordan. Results showed that there were statistically significant differences in the employees' attitudes towards the challenges facing the application of strategic management in telecom sector in Jordan: Zain and Orange. It also showed that there were statistically significant differences in the employees' attitudes towards the challenges facing the

application of strategic management in telecom sector in Jordan due to the gender, experience and job title variables.

From the literature review, it seems that different studies used different tools to investigate the impact of strategic management on organizations' business performance. The current study will use the balanced scorecard as a tool to investigate the effect of strategic management on Jordanian Pharmaceutical Manufacturing organizations' business performance.

## **Study Methodology (Methods and Procedures):**

### **Study Design**

The current study is considered as a casual study. It aimed at investigating the cause/effect relationship between strategic management (BSC elements) and Jordanian Pharmaceutical Manufacturing organizations' business performance. It started with literature review and experts' interviews to develop the currently used measurement model and explore the strategic management profile of the Jordanian Pharmaceutical Manufacturing organizations. Then, a panel of judges was conducted to finalize the items to be included in the questionnaire. Finally, the survey was carried out and the data collected from the managers working at Jordanian Pharmaceutical Manufacturing organizations, then the data were verified through the SPSS 20 focusing on the correlation among strategic management variables and their relationships with Jordanian Pharmaceutical Manufacturing organizations' business performance. To confirm the suitability of the questionnaire reliability and validity were carried out.

### **Study Population, Sample and Unit of Analysis**

At the time of study, the Jordanian Pharmaceutical Manufacturing organizations were only sixteen organizations, which were registered in Jordanian Association of Pharmaceutical Manufacturers (JAPM) by December 2013. The entire population will be chosen to explore the strategic management topic, thus negating any need for sampling. The survey unit of analysis was composed of all managers working at Jordanian Pharmaceutical Manufacturing organizations; all managers were targeted to be included in the study regardless of their title or educational background.

### **Data Collection Methods**

The data which used for fulfilling the purposes of the study were divided into two groups: secondary and primary data. Secondary data were collected from Jordanian Association of Pharmaceutical Manufactures (JAPM), organizations' annual reports, journals, books, researches, thesis, dissertations, articles, working papers, and the Worldwide Web. Primary data were collected from expert interviews, panel of judges, and the survey (questionnaire).

The Questionnaire: Initial items to measure various constructs were developed depending on prior researches. The questionnaire was designed and developed in contrast with hypotheses and research model. Then the questionnaire was validated through expert interviews and a panel of judges.

### **Questionnaire Variables**

Independent Variables (Strategic Management): Through literature review and BSC model, the researchers have identified four important independent variables that contribute to Jordanian Pharmaceutical Manufacturing organizations' business performance: financial perspective, customer perspective, internal processes perspective, and learning and growth perspective.

Dependent variable (Organizations' Business Performance): Dependent variable of the study is related to Jordanian Pharmaceutical Manufacturing organizations' business performance.

All variables will be measured by five-point Likert-type scale to tap into the managers' perceptions, ranging from value 1 (strongly disagree) to value 5 (strongly agree) used throughout the questionnaire.

**Data Analysis**

To approach the aim of the study, practical data were collected from 13 companies out of 16 companies, by means of a questionnaire. The questionnaire was delivered to about 140 managers out of 250, only 95 questionnaires were completed, out of 95 questionnaires only 90 were suitable for further analysis. Statistical techniques such as descriptive statistics, t-test, ANOVA test, correlation, simple and multiple regressions were employed. To confirm the suitability of data collection instrument, a Kolmogorov-Smirnov (K-S) test, Cronbach's Alpha and factor analysis were used.

**Demographic Analysis**

Through this section, the general characteristics of the respondents will be discussed in terms of gender, age, education level, certificate, experience, department, and management level, See table (1).

Table (1): Respondents Characteristics (Demographic Data)

| No. | Variable         | Category              | Frequency | Percent (%) |
|-----|------------------|-----------------------|-----------|-------------|
| 1   | Gender           | Male                  | 66        | 55.5%       |
|     |                  | Female                | 24        | 20.2%       |
| 2   | Age              | Less than 30          | 22        | 18.5%       |
|     |                  | 30-39                 | 34        | 28.6%       |
|     |                  | 40-49                 | 26        | 21.8%       |
|     |                  | More than 50          | 8         | 6.7%        |
| 3   | Education        | Diploma               | 7         | 5.9%        |
|     |                  | Bachelor              | 61        | 51.3%       |
|     |                  | Master                | 20        | 16.8%       |
|     |                  | Ph.D.                 | 2         | 1.7%        |
| 4   | Certificate      | Pharmacist            | 19        | 16%         |
|     |                  | Other Science         | 35        | 29.4%       |
|     |                  | Management            | 19        | 16%         |
|     |                  | Finance & Accounting  | 17        | 14.3%       |
| 5   | Experience       | Less than 10          | 37        | 31.1%       |
|     |                  | 10-19                 | 35        | 29.4%       |
|     |                  | 20-29                 | 16        | 13.4%       |
|     |                  | More than 30          | 2         | 1.7%        |
| 6   | Department       | Management & Finance  | 46        | 38.7%       |
|     |                  | R&D                   | 27        | 22.7%       |
|     |                  | Production Department | 13        | 10.9%       |
|     |                  | Marketing Department  | 4         | 3.4%        |
| 7   | Management Level | Top Management        | 4         | 3.4%        |
|     |                  | Middle Management     | 44        | 37%         |
|     |                  | Lower Management      | 42        | 35.2%       |
|     | Total            |                       | 90        | 100%        |

**Normality Test**

In order to verify the normal distribution of variables, the researcher carried out Kolmogorov-Smirnov (K-S) Z test. If the significance level was more than 5 percent, normality was assumed. Table (2) shows that all the independent and dependent variables are normally distributed.

Table (2): Normality Test: One-Sample Kolmogorov-Smirnov (Z) Test

| Variables                       | (K-S)Z | Sig.  |
|---------------------------------|--------|-------|
| Financial Perspective           | 0.842  | 0.477 |
| Customer Perspective            | 0.806  | 0.535 |
| Internal Processes Perspective  | 1.165  | 0.132 |
| Learning and Growth Perspective | 1.272  | 0.079 |
| BSC                             | 0.776  | 0.584 |
| Business Performance            | 0.807  | 0.532 |

**Reliability Test: (Cronbach’s Alpha)**

Reliability test (Cronbach’s alpha coefficients of internal consistency) was used to test the consistency and suitability of the measuring tools. If Alpha Coefficients were above 0.80, consistency and suitability were considered high. Table (3) shows that the reliability was evident by strong Cronbach’s alpha coefficients of internal consistency for all variables.

Table (3): Cronbach’s Alpha for all Variables:

| Variables                       | Alpha |
|---------------------------------|-------|
| Financial Perspective           | 0.885 |
| Customer Perspective            | 0.868 |
| Internal Processes Perspective  | 0.879 |
| Learning and Growth Perspective | 0.887 |
| BSC                             | 0.920 |
| Business Performance            | 0.825 |

**Validity Test**

Two methods were used to confirm content and construct validity: First, multiple sources of data (literature, expert interviews, and panel of judges) were used to develop and refine the model and measures. Then, factor analysis (Principle Component Analysis) was carried out for all items included in the questionnaire. The factor loading value more than 0.4 is accepted, while below 0.4 should be removed. Table (4) shows that all variables are valid, while table (5) shows that all items are valid, except "Product design customer sharing" item, reported 0.333.

Table (4): Factors Loading for all Variables

| Variables                       | Factor 1 | Extraction |
|---------------------------------|----------|------------|
| Financial Perspective           | 0.830    | 0.689      |
| Customer Perspective            | 0.899    | 0.809      |
| Internal Processes Perspective  | 0.852    | 0.906      |
| Learning and Growth Perspective | 0.918    | 0.842      |
| Business Performance            | 0.948    | 0.899      |

Table (5): Factors Loading for all Variables Items

| Item   | FP    | CP    | IPP   | LGP   | BP |
|--|-------|-------|-------|-------|----|
| Financial resources utilization                    | 0.725 |       |       |       |    |
| Revenue improvement                                | 0.584 |       |       |       |    |
| Suitable pricing policy                            | 0.580 |       |       |       |    |
| Pricing to competitors                             | 0.609 |       |       |       |    |
| Fair profit  | 0.599 |       |       |       |    |
| Increasing shareholders wealth                     | 0.789 |       |       |       |    |
| Clear financial goals                              | 0.683 |       |       |       |    |
| Consider shareholders opinion                      | 0.676 |       |       |       |    |
| Dividend to shares                                 | 0.518 |       |       |       |    |
| Cash flow  | 0.551 |       |       |       |    |
| Sales increase                                     | 0.660 |       |       |       |    |
| Shareholders satisfaction                          | 0.585 |       |       |       |    |
| Financial benchmarking                             | 0.663 |       |       |       |    |
| Financing performance                              | 0.543 |       |       |       |    |
| New markets sales                                  | 0.554 |       |       |       |    |
| Concern about customers                            |       | 0.525 |       |       |    |
| Customer evaluation to company                     |       | 0.576 |       |       |    |
| No. of complains                                   |       | 0.584 |       |       |    |
| Responds to customers complains                    |       | 0.715 |       |       |    |
| Customer satisfaction assessment                   |       | 0.696 |       |       |    |
| Customer satisfaction level                        |       | 0.734 |       |       |    |
| Importance of customer satisfaction                |       | 0.750 |       |       |    |
| Prices are suitable to customers                   |       | 0.577 |       |       |    |
| Added value to customers                           |       | 0.620 |       |       |    |
| Full customer data base                            |       | 0.647 |       |       |    |
| Provide services better than competitors           |       | 0.598 |       |       |    |
| Product selection customer sharing                 |       | 0.425 |       |       |    |
| Product design customer sharing                    |       | 0.333 |       |       |    |
| Using promotion to gain customer                   |       | 0.517 |       |       |    |
| Balancing between market share and production      |       | 0.580 |       |       |    |
| Systems development                                |       |       | 0.653 |       |    |
| Clear strategic goals                              |       |       | 0.515 |       |    |
| Competent employees                                |       |       | 0.679 |       |    |
| Participation in decision making                   |       |       | 0.571 |       |    |
| Multisource of data                                |       |       | 0.685 |       |    |
| Registering IPRs                                   |       |       | 0.684 |       |    |
| Production strategies implementations              |       |       | 0.588 |       |    |
| Introducing new products in suitable time          |       |       | 0.514 |       |    |
| Internal processes create competitive advantages   |       |       | 0.603 |       |    |
| Internal processes aim to reduce cost              |       |       | 0.614 |       |    |
| Production processes development                   |       |       | 0.597 |       |    |
| Resources used to create accepted revenue          |       |       | 0.533 |       |    |
| Follow quality guides                              |       |       | 0.710 |       |    |
| Development processes create competitive advantage |       |       | 0.643 |       |    |
| Many strategic alliances                           |       |       | 0.575 |       |    |
| Suitable training programs                         |       |       |       | 0.674 |    |
| Training programs aim to improver quality          |       |       |       | 0.666 |    |

|  |  |  |  |       |       |
|--|--|--|--|-------|-------|
| Developing innovation capabilities               |  |  |  | 0.636 |       |
| Innovative problem solutions                     |  |  |  | 0.571 |       |
| Employees propose improvements                   |  |  |  | 0.721 |       |
| Creative ideas to develop performance            |  |  |  | 0.657 |       |
| Company concern about adding value to employees  |  |  |  | 0.474 |       |
| Employees turn over                              |  |  |  | 0.593 |       |
| Employee profitability                           |  |  |  | 0.584 |       |
| Employees with suitable experience               |  |  |  | 0.674 |       |
| Company concern about experience development     |  |  |  | 0.531 |       |
| Company care about experienced employees         |  |  |  | 0.582 |       |
| Clear company culture                            |  |  |  | 0.695 |       |
| Using latest technology for R&D                  |  |  |  | 0.524 |       |
| Attracting the best ideas to support company     |  |  |  | 0.763 |       |
| Clear future vision                              |  |  |  |       | 0.536 |
| Planning for future                              |  |  |  |       | 0.419 |
| Good position among competitors                  |  |  |  |       | 0.524 |
| Good public reputation                           |  |  |  |       | 0.584 |
| Cost of operations compared to competitors       |  |  |  |       | 0.551 |
| Cost of product unit compared to competitors     |  |  |  |       | 0.738 |
| Productivity of employee compared to competitors |  |  |  |       | 0.555 |
| Average profit compared to competitors           |  |  |  |       | 0.657 |
| Evident per share                                |  |  |  |       | 0.544 |
| Stock price (company evaluation)                 |  |  |  |       | 0.598 |
| Company growth                                   |  |  |  |       | 0.733 |
| New products in pipeline                         |  |  |  |       | 0.562 |

## Data Analysis and Results

### Study Variables Analysis

This section analyzes and describes the independent and dependent variables from statistical point of view including means, standard deviations, and t-values.

### Balance Scorecard and its Variables

Table (6), shows that the average means of the respondents' perception about the implementation of balanced scorecard variables were ranging from 3.86 to 3.95, with standard deviation ranges from 0.377 to 0.487. Such result indicates that there is an agreement on the implementation of balanced scorecard variables. The overall result indicates that there is a significant implementation of the balanced scorecard among JPM Organizations, where ( $t=22.129 > 1.645$ ).

Table (6): Mean, Standard Deviation and One-Sample T-Test Results for Independent and Dependent Variables.

| Variable                       | Mean  | Std. Deviation | T value | T tabulated |
|--------------------------------|-------|----------------|---------|-------------|
| Financial Perspective          | 3.885 | 0.487          | 17.235  | 1.645       |
| Customer Perspective           | 3.860 | 0.420          | 19.432  | 1.645       |
| Internal Processes Perspective | 3.922 | 0.397          | 22.023  | 1.645       |
| Learning & Growth Perspective  | 3.942 | 0.413          | 21.626  | 1.645       |
| Balanced Scorecard             | 3.902 | 0.387          | 22.129  | 1.645       |
| Business Performance           | 3.951 | 0.377          | 23.927  | 1.645       |

Table (7), shows that the average means of respondents' perception about the implementation of financial perspective variable items were ranging from 3.41 to 4.34, with standard deviation ranges from 0.686 to 0.886. Such result indicates that there is varied agreement among respondents on the implementation of the financial perspective variable items. The result indicates that there is a significant implementation of the financial perspective variable, where ( $t=17.235 > 1.645$ ).

Table (7): Mean, Standard Deviation and One-Sample T-Test Results Financial Perspective Variable Items.

| Items                           | Mean         | Std. Deviation | T value       | T tabulated  |
|---------------------------------|--------------|----------------|---------------|--------------|
| Financial resources utilization | 3.87         | 0.690          | 11.912        | 1.645        |
| Revenue improvement             | 3.96         | 0.686          | 13.224        | 1.645        |
| Suitable pricing policy         | 3.90         | 0.780          | 10.951        | 1.645        |
| Pricing to competitors          | 3.92         | 0.877          | 9.976         | 1.645        |
| Fair profit                     | 4.01         | 0.757          | 12.673        | 1.645        |
| Increasing shareholders wealth  | 3.77         | 0.849          | 8.570         | 1.645        |
| Clear financial goals           | 4.00         | 0.750          | 12.657        | 1.645        |
| Consider shareholders opinion   | 3.78         | 0.832          | 8.872         | 1.645        |
| Dividend to shares              | 3.41         | 0.886          | 4.404         | 1.645        |
| Cash flow                       | 3.62         | 0.856          | 6.899         | 1.645        |
| Sales increase                  | 4.04         | 0.778          | 12.742        | 1.645        |
| Shareholders satisfaction       | 3.90         | 0.750          | 11.380        | 1.645        |
| Financial benchmarking          | 3.94         | 0.725          | 12.366        | 1.645        |
| Financing performance           | 3.81         | 0.847          | 9.089         | 1.645        |
| New markets sales               | 4.34         | 0.706          | 18.074        | 1.645        |
| <b>Financial Perspective</b>    | <b>3.885</b> | <b>0.487</b>   | <b>17.235</b> | <b>1.645</b> |

Table (8), shows that the average means of respondents' perception about the implementation of customer perspective variable items were ranging from 3.49 to 4.17, with standard deviation ranges from 0.560 to 0.807. Such result indicates that there is varied agreement among respondents on the implementation of the customer perspective variable. The result indicates that there is a significant implementation of the customer perspective variable, where ( $t=19.432 > 1.645$ ).

Table (8): Mean, Standard Deviation and One-Sample T-Test Results Customer Perspective Variable Items

| Items   | Mean         | Std. Deviation | T value       | T tabulated  |
|---|--------------|----------------|---------------|--------------|
| Concern about customers                       | 3.99         | 0.695          | 13.499        | 1.645        |
| Customer evaluation to company                | 3.78         | 0.700          | 10.548        | 1.645        |
| No. of complains                              | 3.86         | 0.728          | 11.155        | 1.645        |
| Responds to customers complains               | 4.02         | 0.807          | 12.017        | 1.645        |
| Customer satisfaction assessment              | 3.73         | 0.776          | 8.965         | 1.645        |
| Customer satisfaction level                   | 3.97         | 0.661          | 13.871        | 1.645        |
| Importance of customer satisfaction           | 4.17         | 0.658          | 16.828        | 1.645        |
| Prices are suitable to customers              | 3.98         | 0.560          | 16.551        | 1.645        |
| Added value to customers                      | 3.77         | 0.750          | 9.694         | 1.645        |
| Full customer data base                       | 3.77         | 0.671          | 10.836        | 1.645        |
| Provide services better than competitors      | 3.82         | 0.696          | 11.202        | 1.645        |
| Product selection customer sharing            | 3.58         | 0.749          | 7.316         | 1.645        |
| Product design customer sharing               | 3.49         | 0.723          | 6.417         | 1.645        |
| Using promotion to gain customer              | 3.99         | 0.645          | 14.552        | 1.645        |
| Balancing between market share and production | 3.93         | 0.684          | 12.951        | 1.645        |
| <b>Customer Perspective</b>                   | <b>3.860</b> | <b>0.420</b>   | <b>19.432</b> | <b>1.645</b> |

Table (9), shows that the average means of respondents' perception about the implementation of internal processes perspective variable items were ranging from 3.76 to 4.08, with standard deviation ranges from 0.548 to 0.847. Such result indicates that there is varied agreement among respondents on the implementation of the of internal processes perspective variable. The result indicates that there is a significant implementation of the of internal processes perspective variable, where ( $t=22.023 > 1.645$ ).

Table (9): Mean, Standard Deviation and One-Sample T-Test  
Results Internal Processes Perspective Variable Items.

| Items   | Mean         | Std. Deviation | T value       | T tabulated  |
|---|--------------|----------------|---------------|--------------|
| Systems development   | 3.94         | 0.676          | 13.246        | 1.645        |
| Clear strategic goals   | 3.89         | 0.661          | 12.757        | 1.645        |
| Competent employees   | 4.00         | 0.561          | 16.914        | 1.645        |
| Participation in decision making                                | 3.89         | 0.608          | 13.872        | 1.645        |
| Multisource of data   | 3.90         | 0.671          | 12.720        | 1.645        |
| Registering IPRs  | 3.84         | 0.847          | 9.460         | 1.645        |
| Production strategies implementations                           | 3.88         | 0.650          | 12.802        | 1.645        |
| Introducing new products in suitable time                       | 3.76         | 0.567          | 12.640        | 1.645        |
| Internal processes aim to create competitive advantages         | 3.88         | 0.668          | 12.475        | 1.645        |
| Internal processes aim to reduce cost                           | 3.82         | 0.663          | 11.760        | 1.645        |
| Production processes development                                | 3.94         | 0.548          | 16.351        | 1.645        |
| Suitable initialization of resources to create accepted revenue | 3.90         | 0.601          | 14.217        | 1.645        |
| Follow quality guides   | 4.08         | 0.691          | 14.804        | 1.645        |
| Development processes aim to create competitive advantage       | 4.07         | 0.577          | 17.547        | 1.645        |
| Many strategic alliances  | 4.03         | 0.710          | 13.802        | 1.645        |
| <b>Internal Processes Perspective</b>                           | <b>3.922</b> | <b>0.397</b>   | <b>22.023</b> | <b>1.645</b> |

Table (10), shows that the average means of respondents' perception about the implementation of learning and growth perspective variable items were ranging from 3.70 to 4.10, with standard deviation ranges from 0.551 to 0.756. Such result indicates that there is varied agreement among respondents on the implementation of the of learning and growth perspective variable. The result indicates that there is a significant implementation of the of learning and growth perspective variable, where ( $t=21.626 > 1.645$ ).

Table (10): Mean, Standard Deviation and One-Sample T-Test  
Results Learning and Growth Perspective Variable Items.

| Items   | Mean | Std. Deviation | T value | T tabulated |
|---|------|----------------|---------|-------------|
| Suitable training programs                      | 3.94 | 0.755          | 11.868  | 1.645       |
| Training programs aim to improver quality       | 4.10 | 0.654          | 15.949  | 1.645       |
| Developing innovation capabilities              | 4.07 | 0.684          | 14.801  | 1.645       |
| Innovative problem solutions                    | 3.79 | 0.645          | 11.609  | 1.645       |
| Employees propose improvements                  | 3.70 | 0.661          | 10.045  | 1.645       |
| Creative ideas to develop performance           | 3.99 | 0.662          | 14.174  | 1.645       |
| Company concern about adding value to employees | 4.02 | 0.580          | 16.716  | 1.645       |
| Employees turn over                             | 3.89 | 0.741          | 11.378  | 1.645       |
| Employee profitability                          | 3.70 | 0.756          | 8.781   | 1.645       |
| Employees with suitable experience              | 4.08 | 0.622          | 16.433  | 1.645       |

|  |              |              |               |              |
|--|--------------|--------------|---------------|--------------|
| Company concern about experience development | 4.01         | 0.551        | 17.419        | 1.645        |
| Company care about experienced employees     | 4.00         | 0.670        | 14.151        | 1.645        |
| Clear company culture                        | 3.91         | 0.593        | 14.578        | 1.645        |
| Using latest technology for R&D              | 3.93         | 0.650        | 13.623        | 1.645        |
| Attracting the best ideas to support company | 3.96         | 0.634        | 14.289        | 1.645        |
| <b>Learning &amp; Growth Perspective</b>     | <b>3.942</b> | <b>0.413</b> | <b>21.626</b> | <b>1.645</b> |

Table (11), shows that the average means of respondents' perception about the implementation of business performance variable items were ranging from 3.67 to 4.32, with standard deviation ranges from 0.577 to 0.747. Such results indicate that there is varied agreement on the role of business performance indicators. The result indicates that there is a significant role of business performance indicators, where ( $t=23.927 > 1.645$ ).

Table (11): Mean, Standard Deviation and One-Sample T-Test Results Business Performance Variable Items.

| Items  | Mean         | Std. Deviation | T value       | T tabulated  |
|--|--------------|----------------|---------------|--------------|
| Clear future vision                              | 4.17         | 0.640          | 17.283        | 1.645        |
| Planning for future                              | 4.27         | 0.577          | 20.837        | 1.645        |
| Good position among competitors                  | 4.16         | 0.579          | 18.938        | 1.645        |
| Good public reputation                           | 4.12         | 0.577          | 18.443        | 1.645        |
| Cost of operations compared to competitors       | 3.88         | 0.615          | 13.542        | 1.645        |
| Cost of product unit compared to competitors     | 3.72         | 0.671          | 10.213        | 1.645        |
| Productivity of employee compared to competitors | 3.67         | 0.636          | 9.944         | 1.645        |
| Average profit compared to competitors           | 3.71         | 0.691          | 9.764         | 1.645        |
| Evident per share                                | 3.70         | 0.644          | 10.313        | 1.645        |
| Stock price (company evaluation)                 | 3.74         | 0.696          | 10.146        | 1.645        |
| Company growth                                   | 3.96         | 0.634          | 14.289        | 1.645        |
| New products in pipeline                         | 4.32         | 0.747          | 16.793        | 1.645        |
| <b>Business Performance</b>                      | <b>3.951</b> | <b>0.377</b>   | <b>23.927</b> | <b>1.645</b> |

### Relationships among and between Variables

Before testing the hypotheses a Bivariate Pearson correlation coefficient was carried out to test the correlation and relationships among strategic management (balanced scorecard) variables and between them and Jordanian Pharmaceutical Manufacturing organizations' business performance.

Table (12): Pearson's Correlation (r) Among Independent Variables, and with Dependent Variable

| Variable                       | FP      | CP      | IPP     | LGP     | BSC     | BP |
|--------------------------------|---------|---------|---------|---------|---------|----|
| Financial Perspective          |         |         |         |         |         |    |
| Customer Perspective           | 0.674** |         |         |         |         |    |
| Internal Processes Perspective | 0.700** | 0.839** |         |         |         |    |
| Learning & Growth Perspective  | 0.670** | 0.746** | 0.905** |         |         |    |
| Balanced Scorecard             | 0.856** | 0.898** | 0.946** | 0.913** |         |    |
| Business Performance           | 0.762** | 0.828** | 0.873** | 0.842** | 0.914** |    |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Pearson correlation matrix table (12) shows that the relationships among the balanced scorecard variables are strong, where  $r$  ranges from 0.670 to 0.905. The result indicates that there is a high relationship among balanced scorecard variables. The matrix shows that the relationship between the total balanced scorecard and each balanced scorecard variable is very strong, where  $r$  ranges from 0.856 to 0.946. The matrix also shows that the relationship between balanced scorecard variables and JPM Organizations' business performance is strong, where  $r$  ranges from 0.762 to 0.873. For total balanced scorecard reaches 0.914, and indicates a very strong relationship between balanced scorecard and JPM Organizations' business performance.

### Hypotheses Testing

To test hypotheses, a multiple regression analysis was used to analyze the relationship between the balanced scorecard variables and JPM Organizations' business performance. Regression analysis is robust against non-normality and, therefore, applicable in the case at hand. The coefficient of determination ( $R^2$ ) indicates the goodness and fitness of the model.

### Simple Regression

H0: Strategic management (balanced scorecard elements) does not have a direct impact on Jordanian Pharmaceutical Manufacturing Organizations' business performance, at  $\alpha \leq 0.05$ .

Table (13): Results of Multiple Regression Analysis: Regressing Total BSC against Business Performance

| Variable  | r     | R <sup>2</sup> | ANOVA F-Value | B     | Beta  | t      | Sig.  |
|-----------|-------|----------------|---------------|-------|-------|--------|-------|
| Total BSC | 0.914 | 0.835          | 444.167       | 0.891 | 0.914 | 21.075 | 0.000 |

The  $R^2$  value is 0.835; therefore, the model is regarded as being suitable to be used for multiple regressions with the data.

The result of the simple regression analysis that regress the average balanced scorecard against JPM organizations' business performance is shown on table (13). It shows that the average balanced scorecard explained 83.5% of the variance, where ( $R^2 = 0.835$ ,  $F=444.167$ ,  $Sig. = 0.000$ ). Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that strategic management (balanced scorecard) has a direct impact on Jordanian Pharmaceutical Manufacturing Organizations' business performance, at  $\alpha \leq 0.05$ , where ( $Beta=0.914$ ,  $t=21.075$ ,  $sig.=0.000$ ).

### Multiple Regressions

The main table (14) shows results of regressing the four variables of balanced scorecard against JPM organizations' business performance. It shows that the four variables together explained 83.6% of the variance, where ( $R^2 = 0.836$ ,  $F=108.466$ ,  $Sig. = 0.000$ ). Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that strategic management (balanced scorecard elements) has a direct impact on Jordanian Pharmaceutical Manufacturing Organizations' business performance, at  $\alpha \leq 0.05$ .

Table (14): Results of Multiple Regression Analysis  
Regressing Total BSC variables against Business Performance

| Variable      | r     | R <sup>2</sup> | ANOVA F- Value | Sig.  |
|---------------|-------|----------------|----------------|-------|
| BSC Variables | 0.914 | 0.836          | 108.466        | 0.000 |

The following table shows the significant effect of each variable within the balanced scorecard variables.

Table (15) Un-standardized & Standardized Coefficients of Multiple Regression Model for BSC Variables

| BSC Variables                  | Un-standardized Coefficients |            | Standardized Coefficients | t-value | p      |
|--------------------------------|------------------------------|------------|---------------------------|---------|--------|
|                                | B                            | Std. Error | Beta                      |         |        |
| (Constant)                     | 0.456                        | 0.169      |                           | 2.696   | 0.008* |
| Financial Perspective          | 0.180                        | 0.049      | 0.232                     | 3.649   | 0.000* |
| Customer Perspective           | 0.238                        | 0.074      | 0.265                     | 3.194   | 0.002* |
| Internal Processes Perspective | 0.244                        | 0.121      | 0.257                     | 2.023   | 0.046* |
| Learning & Growth Perspective  | 0.234                        | 0.095      | 0.256                     | 2.458   | 0.016* |

\*Calculate is less than 0.05

Table (15) result shows that the customer perspective has the highest effect on JPM organizations' business performance where (Beta=0.257, sig.=0.045), followed by internal processes perspective, (Beta=0.265, sig.=0.002), then learning and growth perspective, where (Beta=0.256, sig.=0.016), and financial perspective, where (Beta=0.232, sig.=0.000), respectively.

H0.1: Financial Perspective does not have a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

From table above, it is concluded that there is a positive direct effect of the financial perspective variable on the JPM Organizations' business performance, where (Beta=0.232, sig.=0.000). Since ( $t=3.649$ ,  $p < 0.05$ ), the null hypothesis is rejected and the alternative hypothesis is accepted, which indicates that the financial Perspective has a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

H0.2: Customer perspective does not have a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

Table (15) shows that there is a positive direct effect of the customer perspective variable on the JPM Organizations' business performance, where (Beta=0.257, sig.=0.045). Since ( $t=3.194$ ,  $p < 0.05$ ), the null hypothesis is rejected and the alternative hypothesis is accepted, which indicates that the customer perspective has a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

H0.3: Internal processes perspective does not have a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

From table (15), it is concluded that there is a positive direct effect of the internal processes perspective variable on the JPM Organizations' business performance, where (Beta=0.265, sig.=0.002). Since ( $t=2.023$ ,  $p < 0.05$ ), the null hypothesis is rejected and the alternative hypothesis is accepted, which indicates that the internal processes perspective has a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

H0.4: Learning and growth perspective does not have a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

The above table shows that there is a positive direct effect of the learning and growth perspective variable on the JPM Organizations' business performance, where (Beta=0.256, sig.=0.016). Since ( $t=2.458$ ,  $p < 0.05$ ), the null hypothesis is rejected and the alternative hypothesis is accepted, which indicates that the

Learning and growth perspective has a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

## Results Discussion

The result of the study shows there is an agreement on high implementation of balanced scorecard variables and there is a significant implementation of the balanced scorecard among JPM Organizations, where ( $t=22.129 > 1.645$ ). Result also shows that the learning and growth perspective rated highest average, followed by internal processes perspective, then financial perspective and customer perspective, respectively and there is a significant role of business performance indicators, where ( $t=23.927 > 1.645$ ).

Pearson correlation result indicates that there is a high relationship among balanced scorecard variables. The matrix shows that the relationship between the total balanced scorecard and each balanced scorecard variable is very strong. The matrix also shows that the relationship between balanced scorecard variables and JPM Organizations' business performance is strong, and indicates a very strong relationship between balanced scorecard and JPM Organizations' business performance.

The result of the simple regression analysis indicates that strategic management (balanced scorecard) has a direct impact on Jordanian Pharmaceutical Manufacturing Organizations' business performance, at  $\alpha \leq 0.05$ , and the multiple regressions result shows that strategic management (balanced scorecard elements) has a direct impact on Jordanian Pharmaceutical Manufacturing Organizations' business performance, at  $\alpha \leq 0.05$ .

The result also shows that the financial Perspective has a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ , the customer perspective has a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ , the internal processes perspective has a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ , the Learning and growth perspective has a direct effect on Jordanian Pharmaceutical Manufacturing organizations' business performance, at  $\alpha \leq 0.05$ .

Finally, the result shows that the customer perspective has the highest effect on JPM organizations' business performance, followed by internal processes perspective, then learning and growth perspective and financial perspective, respectively.

## Conclusion

The result of the study shows there is a significant implementation of the balanced scorecard variables among JPM Organizations, the learning and growth perspective rated highest average, followed by internal processes perspective, then financial perspective and customer perspective, respectively. Result also indicates that there is a high relationship among balanced scorecard variables and between balanced scorecard variables and JPM Organizations' business performance is strong.

The result of the simple regression and the multiple regressions analysis shows that strategic management (balanced scorecard elements) has a direct impact on Jordanian Pharmaceutical Manufacturing Organizations' business performance. Finally, the result shows that the customer perspective has the highest effect on JPM organizations' business performance, followed by internal processes perspective, then learning and growth perspective and financial perspective, respectively.

## Limitations and Recommendations

This study was carried out on Jordanian Pharmaceutical Manufacturing organizations, i.e. only one industry and in one country - Jordan. Therefore, we recommend performing similar studies on other industries in

Jordan. To be able to generalize the study results to other countries we advice carrying such study on other countries, especially Arab countries because they are having similar social and cultural settings. We recommend using the four elements of balanced score care together because they affect each other.

### Practical Implications

The research results might help both academicians and practitioners to understand the components of BSC better, and leverage them within their organizations. BSC contains important variables therefore it should be taken into serious consideration when formulating the JPM Organizations' strategy. JPM Organizations should use the four perspectives of BSC together to improve JPM Organizations' BP.

### Expected Value

The empirical results of this study built on the previous researches on the relationship between BSC and organizations' BP, so it may be used as reference for further research about the relationship between BSC and BP. Results may be useful not only for JPM organizations, but also for other organizations, industries and decision makers.

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