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THE IMPACT OF BUSINESS PROCESS MANAGEMENT ON BUSINESS PERFORMANCE SUPERIORITY

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ABSTRACT: *The objective of this study is to measure the impact of business process management on organization's business performance superiority. The study adopted the approach of business processes management life cycle as a basis for detecting the idea of superiority. The sample included (89) managers, and their opinions and responses were used to describe (process identification and design, process modeling and documentation, process monitoring and controlling, and process optimization , in addition to describe the dimensions of business performance superiority, operational and competitive. Multiple regression analysis method was used to test the idea of the study model, to highlight the contribution of business process management to interpretation of organization's business performance superiority. Sustained superiority requires organization managers to support business processes orientation financially and morally within the business entrepreneurship window, under uncertainty environment, characterized by risk and changeable as future perspective of the value of organization's business performance superiority.*

KEYWORDS: Business Process Management, Business Performance, Superiority

INTRODUCTION

The theoretical and scientific efforts in the field of quality and its management and the re-engineering business process management and its continuous improvement have formed the basis of the researchers' interest in Business Process Management (Trkman, 2010; Kung and Hagen, 2007; Smith and Fingar, 2003). The idea of Business Process Management and the studies and the set of perspective that have appeared to examine it created a new perspective to its life cycle which was thoroughly investigated by Smith(2007) and this perspective is compatible with the problem of the study and its objective. While the modern view of the superiority has taken different road that depends of the company's existed resources which are difficult to imitate . These resources are called unseen assets which are considered the basic factor in achieving superiority. Superiority in the fields of operational and competitive performance has attracted the researchers interest (Chen and Lin, 2006, Sittimalakorn and Hart, 2004). For the purposes of the study, there was a concentration on two fields; superiority of operational business performance as it belongs to the internal organization environment and the superiority in the competitive business performance as it represents the organization's competitive environment . And both of these types of superiority are considered the source of business superiority (Yaghi,2010). Based on what is mentioned previously, the purpose of this study is to identify the impact of the Business Process Management on Business Performance Superiority

LITERATURE REVIEW

Business Process Management pointed that the methodology used to revise and review the organization business and to develop the business processes as the basis for building units of organizations processes systems (Laudon & Laudon, 2013) and business processes system focuses on designing and improving the processes which include business flow from one person to another and from one system to another and from one system to a communication system in the organization (Baltzan, 2012) while Franz and Kirchmer(2012) think it is an advanced management system that helps in achieving efficiency and leading excellence, creativity and strategic initiatives achievement in the organization and so it ensures the rational use of the organization assets and its successful business. Turban,et al(2011) defines business process management as the measurement of advanced performance and analysis entrance which is the host of planning and strategy. While Kung and Hagen(2007) define it as management method that include methods and supportive tools to design the operational business processes , to analyze ,implement and strengthen its value. It is a rule applied by the organizations to maintain the competitive advantage and it is a set of activities supported by tools and systems of business process management which are used by the organization to improve the business processes or to adapt them to the new organization's requirements.

Smith and Fingar (2003) identified the business process management as the supportive power to the management system which leads efficiently the organization and it is the creativity language to achieve the strategic results which its value is seen in supporting the change processes. Irmily (2011) identified it as an organized management approach aims to improve the products' quality and the services to achieve integrated operational results that can guide and link the resources towards achieving strategic goals . therefore , it is an organized method for understanding , documenting , modeling, analyzing , implementing and continuous changing of the business processes and other related resource concerning the organization's ability of adding a value to the businesses (Turban and Volonino, 2012).

The business processes management helps in achieving the organization's competitive advantage which is linked with the organization's processes' efficiently and its products' quality in addition to its services' performance since it has linked to Porter's model (1985)to increase the revenues and this relies on carrying analysis of the value that enable that organization to redesign its internal and external processes to improve effectively and efficiently the organization so as to help the organization uses its resources effectively to produce goods and services that meet the customers' needs and requirements. Singh(2012) clarified the contribution of business processes management in achieving the organization's competitive advantage and he stated that the business processes consists of management processes , operational processes and the supportive processes in addition to other processes describe the basis of the business processes which are classified as : client's strategy , customers' relations , employees' development and satisfaction, process development , quality , change management , financial analysis , reports preparation , capital management , management responsibility , product development , product delivery , the service , administrative accounting , and technology management and all of these processes form the basis of achieving the competitive advantage . Some of the successful factors for adopting the business processes management in the organization's performance as Ringim et al (2012) illustrated in a study investigated the banks' performance in Nigeria were investment in the information technology , size of the financial activities , the management's commitment , the strength of the capital and the

efficiency of the incentives' system as these factors have significant relation with the organization's performance as a whole (cost reduction, customers' service management and the processes performance efficiency).

Perspectives of Business Processes Management

In his study, Irmily (2011) mentioned Gillot's opinion (2008) that stated four perspectives :

- Business perspective which includes three dimensions which are : organization's strategy , compatibility with the market and the organization's position in the target market.
- Organization perspective which includes performance dimension (financial goals, access time to the market, level of service quality), improvement dimension (cost reduction , processes improvement and stability of following up tools of the processes.
- Processes perspective as there are many processes in every organization to make it strong or weak and these processes are used all the levels of the organization because its economic activity consists of multi processes as manufacturing the products , providing the services and managing the customers' relations.
- Technology perspective which is represented by two levels : the ability of the existed information systems in facilitating the processes' implementation and the impact of using technology in the processes ' continuity .

Models & types of business processes

The researchers looked at models and types of business processes from different points of views; Baker and Maddux(2008) identified them as the customers' external processes as marketing, sales and services after sale and internal processes as production and distribution processes while Llewellyn and Armisted(2000) believed that they were operational process accompanied the method that the organization used to develop its strategies , create and produce its products and services in addition to marketing and selling these products. And Gillot (2008) divided the processes to four groups according to the goal ; integration processes, human or cooperation processes , taking decision processes and documentation processes. Whereas, Barnes(2008) classified the processes into three types based on the type of the resource that is transferred during the process; materials treatment processes, processes of information processing and the customers' following up processes whereas Irmily(2010)classified them into primary processes as production or services that starts and ends at the customer and the secondary processes that support the primary processes as those processes related to the suppliers , stakeholders, administrative processes and employees.

Business Process Cycle

The researchers addressed the stages of the business processes cycle within different methods ; Gillot(2008) believes that the stages of the business processes cycle includes the following : modeling the processes , processes management , and processes improvement while Irmily(2010) pointed that the stages of the business process cycle could include the following : identifying and designing the processes , process implementation following up the controlling the processes and the

process development . Singh(2012) classified these stages into five activities : designing the processes ,modeling the processes, implementing the processes , controlling and the development of the processes .

Dimensions of the business processes management

The business processes management is an organized management method that aims at improving the quality and services' development through identifying ,designing, modeling ,documenting ,controlling and improving the business processes to achieve integrated operational results that can link the resources and guide them towards achieving the organization's strategic goals (Gillot,2008,p25). It is possible to look at the dimensions of the business processes according to the following classification (Irmily,2011):

Identifying & designing the processes: to identify ,determine and analyze the processes, in addition to the general perspective and the nature and size of the processes ,and their varieties and advantages through identifying the goals, abilities , resources and the integrated nature of the processes .

Modeling & documenting the processes :to identify the processes' goals ,limits and responsibilities accurately and to carry out careful analysis to the data in addition to use the plans and the stimulation to understand its impact on the system in general and then to document the processes and to evaluate the feedback.

Following up & controlling the processes : to follow up the processes and their activities ,procedures, resources , technology and information and to review continuously the processes , to control and match the implementation with the goals achievement and to identify the deviations , problems and the corrective procedures to have the outputs with the planned scope.

Improving the processes : it is an approach includes the procedures that are followed to analyze and develop the existed processes in the organization so as to improve its future performance and to propose improvements concerning methods of achieving the processes that help in improving the outputs better than today.

Superiority in business performance : the successful organizations look continuously to organizational , administrative and leading ways that enable them to maintain the level of the success and the transformation to better ones that enhance the idea of superiority . Al-Khafagi& Al-Ghalbi (2010) identified the trends of superiority by focusing on the processes that participate in achieving such superiority and the results through achieving progress in the results of the competitive organizations in the fields of market superiority and quality, in addition to the superiority that can be achieved through focusing on the distinguished performance and the other one is based on electing the organization's best skills that support the strength of the initiative . And superiority as a result of excellence in using comparative points of a reference with the competitive and advanced organizations, and superiority as a result of balance. Yaghi(2009) used financial and competitive superiority to express performance superiority and Porter(1985) pointed that the company's superior performance is linked with the level of the company's performance progress compared to its competitors' performance.

The companies' desire of superiority requires continuous improvement in their products to suit the customers' needs and expectations and such improvement needs an organizational culture and

environment that accept improvement and the organizational learning could be a basic determiner to the competitive advantage and the superiority in business performance (Fiol & Lyles, 1985, p14). The superior performance is identified as one standard deviation which is higher than performance average or the level of the achieved performance within the high limits at work (Leemann, 2005, p3).

Views of Superiority

Researchers who agreed with the resource-based view pointed to the importance of nonphysical resources as the company's reputation and its ability in sustaining the superior business performance (Chen & Lin, 2006). Others linked the organization's nonphysical resources as the company's good reputation that affects its products' quality and services with its superior performance. Some studies (Sittimalakorn and Hart, 2004) investigated measurements and marketing standards that lead to superiority as using the assets, social and environmental friendship, the ability of developing and keeping the major individuals in the company, degree of creativity, investment value, quality of management and product. Tang and Ogunlana (2003, p 274) presented policies of performance superiority as using information technology in forming management information systems to improve knowledge via the organizations and to improve the quality through the systems of confirming the quality which are expected to help in improving the quality performance and consequently to strengthen the company's reputation and its market share. And Forza (1996) addressed superiority in the operational processes performance through the integration of managing the product flow from the supplier to the consumer as he pointed that companies that seek to achieve superiority in its operational processes should adjust methods of its interaction and communication with the suppliers and the customers; interaction to the top (suppliers) and interaction to the bottom (customers) and the influence of this interaction on the companies' superiority. Other studies addressed the external effects in the strategic actions of the industrial organizations as they assumed that these effects are the basic element in the superiority of the companies' performance. Others as Hoskisson et al (1999) linked the companies' performance's superiority to the characteristics of the industrial structure as measurements of industry's access and restriction of market access, variety, products' excellence and the company's attendance in industry field (Seth & Thomas, 1994). But the resource-based view supposed that every organization has its own unique resources and capabilities that are the basis for its strategy and they serve as the basic source for the company's profitability (Lee et al, 2001). Schmalensee (1985) was the first one who employs a new method as he analyzed practically the factors of the company and the industry and their effect in the company's superiority while Rust et al (1994) adopted the quality approach and its impact on the superior business performance through reducing the costs or through improving the customers' loyalty and attracting new customers. As Schmalensee (2003, p 14) pointed that the companies with superior performance have to struggle for improvement strongly and continuously and the companies with superior environmental performance have common attitudes as committed and transparent management in addition to the internal and external goals' compatibility and the continuous improvement. A number of researcher identified some of the effective factors in sustaining the superior performance as McGaham & Porter (1999) pointed that industry has stronger effects in following up the superior performance than the effects of the company or the businesses. Application studies showed that market share, the company's size, products' variety and the foreigner companies and the growth have a positive relation to superior performance sustaining (Drouopoulos & Lianos, 1993) whereas Robert & Dowling (2002) pointed to the relation between the superior performance and

the companies' good reputation. Others pointed to the effect of the marketing strategies in the superior competitive performance; the companies that follow Cost Leadership Strategy support a great production size with a competitive price for the customers and confirm the role of Cost Leadership Strategy in achieving the company's processes (Alulakh et al, 2000) , in addition to the excellence in performance that create a value for the customer through many ways as creating products, superior quality and technology, besides the good services that distinguish the company from its competitors(Hutchinson, et al, 2007).

Areas of Business Performance Superiority

The researchers address different types of superiority for example, the study of Pil & Rothenberg (2003,p 404) clarified the efforts' nature that enhances the environmental performance and which helps in improving manufacturing patterns in supporting quality which in turns contributes in achieving superiority in the environmental performance as such superiority could be derived from superiority in quality . And the study of Yoshimorig (2005,p 447) addressed another different type of superiority through linking company governance with its ability to achieve the sustainable profitability which in turns achieve returns to shareholders and strengthen the company' value . Waddock & Graves(1997,p 306) pointed that performance superiority provides the necessary financial resources to organizations to get benefit of the investment opportunities and it helps in meeting the stakeholders' needs and achieving their goals . The performance superiority is affected by environmental factors represent : economic factors and the industry structure ;organizational factors as the organizational structure and other management factors as management abilities and the availability of managers' experience and knowledge (Hopkins & Hopkins, 1997, p637). The company's superiority over other companies confirmed its competitive position (Hunt & Morgan, 1995, p6). And the best evidences of strategic performance of the company is its competitive performance (Thompson & Streckland, 1999, p104).

Superiority Domains of Performance

We can look at superiority according to the company's achieved goals and compare them with the competitors as the superior performance with one standard deviation that is higher than the achieved performance rate within the 10% of the market(Leemann,2005,pp.3-10). And although the company's superior performance is usually linked with many fields , but the business performance superiority in this study will be measured within the following two fields :

- Operational performance superiority : superiority in the operational processes performance occurs through the integration of the internal activities management in addition to the integration of activities management of the product flow from the supplier to the consumer as the companies that seek superiority in its operational processes should modify its ways of interaction and communication with the suppliers and the customers (Forza,1996).
- Competitive performance superiority : it showed the level of the company's performance progress compared to the level of its competitors'' performance(Porter,1985), and it will be measured by the market share and sales volume.

Significance of the study

The significance of the study lies in the subject it addresses which is business processes management and its important role in improving its major processes and it addresses the modern approach of superiority which depends on the available resources in the company that is difficult to imitate as the intangible assets which are considered a basic determinant to achieve superiority (Alavarieta & Friedmann, 1994, pp216)

Study's objectives

The study aims to identify the status of business process management in the pharmaceutical industry sector in Jordan and to analyze the role and the effect of business process management in achieving superiority in the performance of the companies of the pharmaceutical industry sector in Jordan instead of providing suggestions and recommendations to the pharmaceutical and food companies to help them to achieve superiority.

Methodology and study's instrument

Based on the nature of the study and the information that should be obtained from the respondents' views and through the questions and the hypotheses of the study, the researchers adopted descriptive, analytic and exploratory approaches. The research investigates the extent of achieving the study's factors represented by the business process and the superiority dimensions in the business performance in the organizations of the pharmaceutical industry sector in Jordan and describes their perceptions using the significance of data that were collected and analyzed using descriptive and analytical statistical methods. The questionnaire, which was used to collect data, consisted of two parts; the first one is allocated to measure the business processes dimensions and the second part is allocated to measure the superiority performance dimensions. The study gets benefit of the studies of Irmily(2011) and Yaghi(2009) in building the instrument.

Statement of the problem

The issue of business processes management has attracted the interest of scholars, experts and managers in their attitudes towards improving the level of the organization's business performance superiority. The limited number of the studies that examined, identified and analyzed the idea of business processes management cycle and its components for their expected influence on the different aspects of the organization's superior business performance was a motivation to adopt this idea in terms of perception, design and achievement in the sector of pharmaceutical industries which has a pioneer role in the Jordanian economy and therefore this sector's companies have to be aware of business processes management cycle and use it to achieve superiority in their businesses performance.

Based on what was mentioned previously, the problem of the study is represented by the following questions:

- 1- Is there any impact to the business process management on the superiority of the business performance ?
- 2- Is there any impact to the business process management on the superiority of the operational performance ?

3- Is there any impact to the business process management on the superiority of the competitive performance ?

Major & sub-Hypotheses of the study:

HO1: there is no statistically significant effect at the level of significance ($\alpha \geq 0.05$) to the business process management and its domains(identifying and designing the process, modeling and documenting the processes ,following and controlling the processes , improving the processes) on the superiority of business performance.

HO1-1 there is no statistically significant effect at the level of significance ($\alpha \geq 0.05$) to the business process management and its domains(identifying and designing the process, modeling and documenting the processes ,following and controlling the processes , improving the processes) on the superiority in the operational business performance .

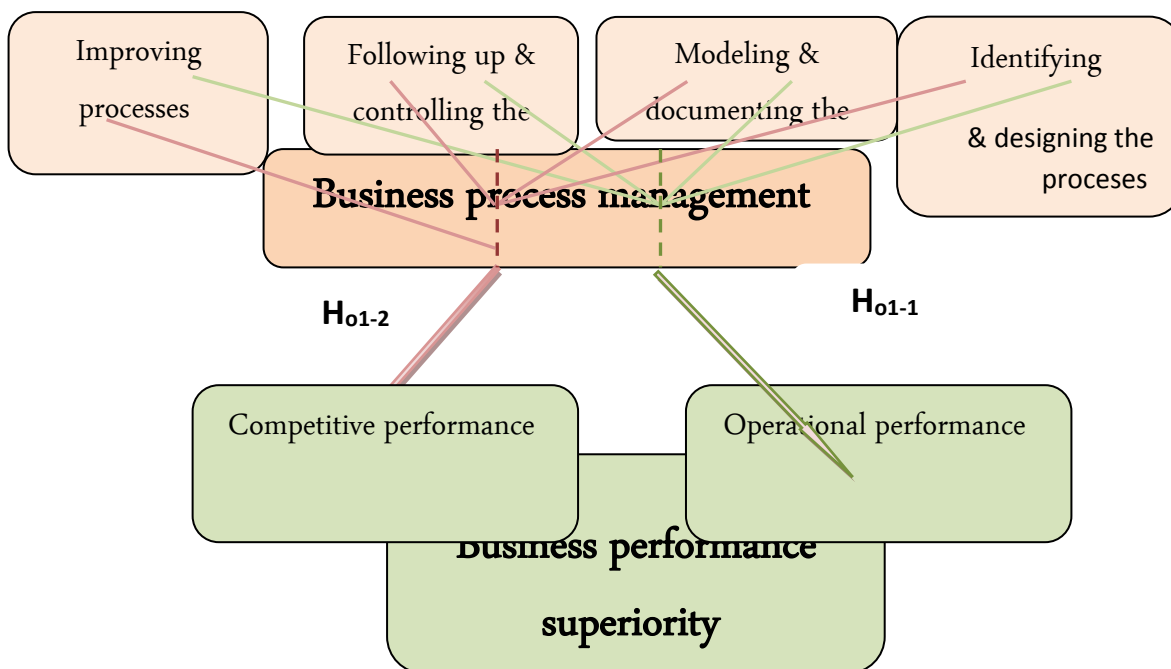
HO1-2 there is no statistically significant effect at the level of significance ($\alpha \geq 0.05$) to the business process management and its domains(identifying and designing the process, modeling and documenting the processes ,following and controlling the processes , improving the processes) on the superiority in the competitive business performance .

Study's variables

Independents variables : the business process management(identifying and designing the process, modeling and documenting the processes ,following and controlling the processes , improving the processes) (Ermily,2011). Dependent variables : superiority in business performance (superiority in the competitive business performance ,superiority in the operational business performance)(Yaghi,2009).

The study's model

Impact of business processes management on superior business performance



The study's populations & its sample

The population of the study consisted of (17) organizations in the pharmaceutical industry sector in Jordan while the sample of the study which was selected purposefully consisted of managers .

The sample & analysis unit

The researchers retrieved 89 questionnaires out of 142 questionnaires which were distributed to 142 managers (executive manager, vice of executive manager, department manager) . And these 89 questionnaires were valid for analysis. The response proportion, which was 63%, was considered acceptable statistically.

Statistical treatment

A set of statistical methods were used to analyze data collected from the questionnaires as : analytical method, ANOVA, and Simple and multi linear Regression to achieve the study's goals through describing the respondents' responses and testing the major and sub - hypotheses so as to come up with the results that help the researcher to present recommendation concerning the topic of this study.

Study's Instrument's Validity & Reliability

To check the instrument's validity, it was presented to a group of academic staff whose opinions and notes were taken into account as it is illustrated in appendix (1). Results in table (1) showed that the value of Cronbach's alpha for the questionnaire as a whole was (0.891) , for business operations value was (0.77) and for business performance superiority was (0.82) and this value is considered higher than the acceptable one (0.60) in the administrative sciences (Sekaran,2003) and this shows the questionnaire's reliability , therefore , the results are dependable.

Table (1) coefficient of Cronbach's alpha

| Reliability Coefficients (Cronbach Alpha) | |
|---|-------|
| Business operation variable | 0.774 |
| business performance superiority variable | 0.820 |
| Questionnaire domains as a whole | 0.891 |

RESULTS & DISCUSSION

Managers' attitudes towards variables of the Model:

This part includes description and analysis of respondents' responses towards the model's variables .Means, standard deviations of the variables domains were calculated and these domains were ordered according to their importance (Newbold et al., 2007, p55). The mean was adopted for the relative importance order to compare between the means as there were three levels of importance: high (>3.66), moderate (3.66-2.33) and low (>2.33) (Sekaran, 2000, p198).

The results in table (2) showed that the independent variable (business process management) achieved general mean (3.47) with a moderate significance indicating the population ‘s achievement of the business process management’s factor and the mean of the independent variable “ superiority in the business performance” was (2.96) with moderate significance indicating the respondents’ attitudes were positive and all of them agree on all the domains of the business process management and business performance superiority . The value of calculated T of the means which was significant assured this result.

Table (2) Means & standard deviations of variables’ domains (N=89)

| Domains of variables | | M | Std | Rank of significance | Level of significance | t | Sig | |
|----------------------|-------------------------------------|---|------|----------------------|-----------------------|----------|--------|------|
| Independent variable | Business process management | Identifying & designing the operations | 3.62 | 0.88 | 2 | Moderate | 26.66* | 0.00 |
| | | Modeling & documenting the operations | 3.07 | 0.95 | 4 | Moderate | 18.27* | 0.00 |
| | | Following up & controlling operations | 3.51 | 0.99 | 3 | Moderate | 17.54* | 0.00 |
| | | Improving operations | 3.66 | 0.87 | 1 | Moderate | 19.88* | 0.00 |
| | | Business process management | 3.47 | 0.92 | Moderate | | 27.69* | 0.00 |
| Dependent variable | Superiority in business performance | Superiority in operational business performance | 2.81 | 0.67 | 6 | Moderate | 29.54* | 0.00 |
| | | Superiority in competitive business performance | 2.93 | 0.72 | 5 | Moderate | 21.82* | 0.00 |
| | | Superiority in business performance | 2.96 | 0.69 | Moderate | | 22.54* | 0.00 |

- Calculated T value = 1.165 at (0.05).

The previous table showed that the domains of business process management’s domains have high means ; in the first rank was “ improving processes” with a mean (3.66)and with moderate significance which indicates the interest in improving the processes while in the second rank was “ identifying & designing the process” with a mean (3.62) followed respectively by “ following up& controlling the processes” with a mean (3.51), “ modeling & documenting the processes” with a mean (3.07) which indicates that managers pay much attention to these domains as an indication to the significance of business process management .

The domains of superiority in the business performance achieved means with moderate significance which are less than the means of the domains of business process management . the mean of domain “superiority in the competitive process performance” was (2.93) with a moderate significance which indicates the managers’ belief in achieving superiority in the competitive business performance while the mean of “ superiority in the operational business performance” was (2.81) with moderate significance indicating availability of superiority in the operational business performance from the perspective of the managers .

Testing the major & sub hypotheses

HO1: there is no statistically significant effect at the level of significance ($\alpha \geq 0.05$) to the business process management and its domains(identifying and designing the process, modeling and documenting the processes ,following up and controlling the processes , improving the processes) on the superiority of business performance.

To test this hypothesis , ANOVA analysis and simple and multiple linear regression were used to check the availability of the impact of business process management on the superiority of business performance .And table (3) illustrated the results of ANOVA analysis between business processes management and the superiority in business performance . There was a significant impact to the business processes management on superiority of business performance at the level of significance α (≤ 0.05). The value of the calculated F was (17.12) and its was statistically significant at the level of significance ($\alpha \leq 0.05$). Table (4) showed the results of simple linear regression analysis that prove the existence of business process management’s impact on the superiority in the business performance as R coefficient was (0.419) at the level of significance ($\alpha \leq 0.05$) while R^2 coefficient was (0.097) which means that (0.097) of the changes in the superiority in business performance is a result of the change in the level of business processes management .

Table (3) results of ANOVA test between business process management and business performance superiority

| | Source | SOS | MS | DF | Calculated T value | Sig. |
|--|------------|--------|-------|----|--------------------|-------|
| business process management / business performance superiority | Regression | 3.215 | 3.215 | 1 | 17.120* | 0.000 |
| | Remains | 29.861 | 0.188 | 88 | | |
| | Total | 33.077 | | 89 | | |

* calculated F= 2.60 at level of significance (0.05).

Table (4): simple linear regression analysis of the business process management on the business performance superiority

| | B | Standard error | Beta | Value t* | Sig. | R | R ² |
|-----------------------------|-------|----------------|-------|----------|-------|-------|----------------|
| Reliability coefficient | 2.337 | 0.389 | | | | 0.419 | 0.097 |
| Business process management | 0.403 | 0.097 | 0.419 | 4.138 | 0.000 | | |

* tabulated T = 1.165 at the level of significance (0.05)

The value of β is (0.419) which indicates an increase with a degree in the business process management leads to an increase in the superiority in the business performance (0.419). The calculated value of T for the impact of business process management on the superiority in the business performance, which was (4.138), was significant at the level of significance ($\alpha \leq 0.05$).

Table (5) Multi Linear Regression analysis of impact of business processes management dimensions on superior business performance

| Business process management | B | Standard error | Beta | Value t* | Sig. | R | R ² |
|---------------------------------------|-------|----------------|-------|----------|-------|-------|----------------|
| Reliability coefficient | 1.586 | 0.428 | | | | 0.408 | 0.167 |
| Identifying & designing the processes | 0.308 | 0.098 | 0.256 | 3.131 | 0.002 | | |
| Modeling & documenting the processes | 0.136 | 0.101 | 0.121 | 1.834 | 0.018 | | |
| Follow up & controlling the processes | 0.154 | 0.107 | 0.131 | 1.844 | 0.015 | | |
| Improving the processes | 1.88 | 0.04 | 0.380 | 2.34* | 0.01 | | |

Tabulated T= 1.165 at (0.05)

To know which dimension of the business process management's dimension has more impact on the superior business performance, multi linear regression test was used as it is

illustrated in table (5). It is clear from table (5) that “improving the processes” is the most influential in the superior business performance with $\beta(0.380)$ which indicates the increase with one degree in (improving the processes” leads to an increase in superior business performance with a value (0.380). The significant value of this influence is confirmed by the calculate T value (2.34) and it is significant statistically at ($\alpha \leq 0.05$) followed respectively by items: “identifying & designing the processes” with β value (0.256) indicating the increase with one degree (identifying & designing the processes) leads to an increase in superior business performance with a value (0.256) and the significance of this impact was asserted by the value of calculate T (3.131), “following up & controlling the processes” with $\beta(0.131)$ indicating an increase with a degree in “following up & controlling the processes” leads to an increase in superior business performance with (0.131) and the significance of this impact was confirmed by the value of the calculate T (1.844) while β value of “modeling & documenting the processes” is (0.121) indicating an increase with a degree in “modeling & documenting the processes” leads to an increase in superior business performance with (0.121) and the significance of this impact was confirmed by the value of the calculate T (1.834) and all of them were statistically significant at ($\alpha \leq 0.05$) and therefore the null hypothesis is rejected and the alternative one is accepted which means there is no impact to the business processes management on the superior business performance.

Testing Sub-Hypotheses

To test the sub-hypotheses, ANOVA and multi linear regression analysis were used to check the impact of business processes management dimensions impact on the superior business performance's dimensions. It is clear from table 6) there is a significant impact of the business processes management on the superior operational business performance at ($\alpha \leq 0.05$)

Also, there is a significance to the business processes management in the competitive business performance at ($\alpha \leq 0.05$). the value of calculate T for every dimension of business performance superiority's dimensions exceeds the value of tabulated T and all of them are statistically significance, therefore; the null hypotheses are rejected and the alternative ones are accepted. Hence, there is an impact of the dimensions of business performance management on the operational business performance superiority and the competitive business performance superiority.

Results of multi linear regression analysis of the impact of superior business processes management's dimensions on the operational business performance superiority showed that all the dimensions of business processes management are significant and this is approved by the β value. This significance impact is approved by T value which exceeds the tabulated value and it is significant at ($\alpha \leq 0.05$). Results concerning multi linear regression analysis of the impact of the business processes management's dimensions on the competitive business performance superiority showed the significance of all the dimensions of business processes management which was proved by the β value. Moreover, the significance of this impact was confirmed by the value of calculated (T) which was higher than the value of tabulated T and it is significant at the level of significance ($\alpha \leq 0.05$)

Results also showed that processes development has the greatest impact on achieving superiority in the operational business performance followed respectively by identifying and designing the processes, following up and controlling the processes and modeling and documenting the processes. Regarding achieving superiority in the competitive business performance, results showed that identifying and designing the processes has the greatest impact on achieving

superiority in the competitive business performance followed respectively by processes development , following up and controlling the processes ,and modeling and documenting the processes .

Table (6) : ANOVA analysis & Multi Linear Regression of the dimensions of business processes management in superiority in the competitive business performance and superiority in operational business performance .

| | | | Beta | t* | R | R ² | F** | Sig |
|---|---|--|-------|--------|-------|----------------|---------|------|
| ANOVA analysis & Multi Linear Regression of the dimensions of business processes management | superiority in operational business performance | Identifying & designing the processes | 0.335 | 4.750* | 0.371 | 0.138 | 4.479** | 0.00 |
| | | Modeling & documenting the process | 0.188 | 2.253* | | | | |
| | | Following up & controlling the process | 0.281 | 3.803* | | | | |
| | | Improving the process | 0.338 | 4.977* | | | | |
| | superiority in the competitive business performance | Identifying & designing the processes | 0.681 | 5.788* | 0.294 | 0.086 | 7.875** | 0.00 |
| | | Modeling & documenting the process | 0.412 | 2.637* | | | | |
| | | Following up & controlling the process | 0.459 | 1.491* | | | | |
| | | Improving the process | 0.530 | 5.175* | | | | |

* tabulated (t)=1.165 at (0.05) **tabulate (f)=3.60 at (0.05).

Table (7) illustrated the Multi Correlation Matrices between the dimensions of the study’s model’s variables. The relation between designing processes dimension and the operational superiority achieved the strongest relation in terms of correlation value (35.8%) followed respectively by the relation between process development and operational superiority with a correlation value (34.2%), the relation between process development dimension and competitive superiority dimension with correlation value(24.8%) and finally the correlation value between designing processes dimension and competitive superiority dimension was (21.4%). The least correlation values were between the operational superiority dimension and the competitive superiority dimension with (5.1%) and the relation between process design and processes modeling with (9.1%).

Table (7) Multi Correlation Matrices between the study’s variables

| | | | | | | | |
|-------------------------------|-------------------------|---------------------|--------------------|-----------------------|-----------------------|-------------------------|-------------------------|
| Business processes management | Designing processes | 1 | | | | | |
| | Modeling processes | .091 ** | 1 | | | | |
| | Controlling processes | .188 ** | .154 ** | 1 | | | |
| | Processes development | .165 ** | .186 * | .199 * | 1 | | |
| Superiority | Operational superiority | .358 ** | .223 ** | .292 * | .342 ** | 1 | |
| | Competitive superiority | .214 ** | .207 * | .226 ** | .248 ** | .051 ** | 1 |
| | | Designing processes | Modeling processes | Controlling processes | Processes development | Operational superiority | Competitive superiority |

Business processes management

Superiority in performance

*significance at (0.05) **significance at (0.01)

Results& Recommendations

The researchers concluded the following results :

- There is a statistically significant impact at the level of significance ($\alpha \leq 0.05$) to the business processes management and its dimensions (identifying & designing the process, modeling and documenting the processes, following up &controlling the processes , improving the processes) on the superiority of business performance.
- There is a statistically significant impact at the level of significance ($\alpha \leq 0.05$) to the business processes management and its dimensions on the superiority of operational business performance .
- There is a statistically significant impact at the level of significance ($\alpha \leq 0.05$) to the business processes management and its dimensions on the superiority of competitive business performance.

Based on these results, the researchers came up with the following conclusions:

- The managers' interest in the components of business processes management's cycle is moderate which indicates an integrated symmetry in improving the processes , identifying and designing processes , following up and controlling the processes and modeling and documenting the processes.
- The managers' interest in the superiority of business performance was distinguished and distributed to both; the competitive performance and the operational processes superiority in an integrated and balanced manner.
- The acceptance of the study's model's idea which was shown in the existence of the impact of business processes management and its dimensions on the business performance superiority and its dimensions. The results also confirmed the acceptance of the major hypothesis and its sub-hypotheses. And therefore , it is possible to interpret the fields of superiority in business performance (competitive and operational) depending on dimensions of business processes management .
- The validity of the business processes perspective as an objective and practical view to promote the superiority in the operational and competitive performance in a sustainable manner that enhances the value of business and its excellence .

Recommendations

- The increase of the awareness of business processes management as an important factor to achieve business performance superiority .
- Having the same degree of interest of both the competitive and operational performance to assure the organization's continuity and excellence in the field of business .
- Holding training courses that help in spreading the knowledge and culture of business processes and superiority fields in business performance .
- Encouraging the researchers to investigate the ideal of the study's model and its hypotheses and to get benefit of its scale so as to generate the results and to spread its use cognitively and practically.

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