

## Developing an Excellence Assessment Model for Jordanian Businesses (EAMJB)

*Rula A. Al-Damen* \*

### ABSTRACT

This study aimed at developing and testing a conceptual causal model for assessing business excellence, which was built upon the same core concepts, and principles of most popular international business excellence approaches. The model called The Excellence Assessment Model for Jordanian Business, in short (EAMJB). It contains the following six major excellence criteria including: - (1) leadership, (2) strategic management, (3) resources (human resources, information, financial, and materials), (4) process, (5) customer and market focus, (6) and finally the business results. The main theory of this conceptual causal model is that leadership is the driver of the model, which drives the enablers' performance and this produces both financial and non-financial results. The prior theory of this causal model that leadership is the driver of the enablers which creates results is confirmed. All of the hypothesized causal relationships in the EAMJB are statistically significant. Leadership has a strong influence on all enablers and business results.

**Keywords:** Excellence, Business Excellence, Excellence Assessment.

### 1. INTRODUCTION

Excellence is an old concept; it has been of interest to society for thousands of years. It is included in all religions, and doing it is considered the best way to hold Allah's words. For example, in the Islamic religion, excellence concept comes (in this meaning) in Al-hadeeth, when Our Prophet Mohammed (Peace Be upon him) said "Allah is pleased with a man having his work well done". The dictionary also has many definitions for the word excellence.

One of the definitions is "doing something well, and with high degree of proficiency, superiority, and first class" (Webster dictionary, 2002). The subject of business excellence is complex and broad, in which many parties are interested especially, managers, customers, employees, suppliers, shareholders, and society as a whole. A review of literature identified many of researchers who have attempted to define the concept.

Researchers such as: Watson (2004, p.1), Dahlgaard 1999, p.2), viewed the firm's excellence from the

stakeholder theory perspective, defining excellence firms, as those firms which are achieving prosperity for all, or taking care of all stakeholders.

Also, the definition of various business excellence awards (Deming Quality Awards, European Quality Awards, Malcolm Baldrige National Quality Awards (MBNQA) were built upon the similar previous view which is the stakeholder view, where business excellence was seen as "a continuous improvement activities leading to excellence in customer satisfaction, employee satisfaction, impact on society, supplier and partnership performance and business, identifying a wide range of business excellence measures namely: customer, employees, suppliers, shareholders, and society as a whole".

Kanji (2001, p.2), presented a more applicable, and measurable definition, where business excellence is seen as a mean of measuring customers, Employees, employees and shareholders satisfaction simultaneously within an organization in order to obtain a comprehensive evaluation of the organizational performance.

Cobb (2003, p.1) and Watson (2004, p.2) viewed organizational excellence as "a new and emerging view of quality. It goes beyond the quality of products and services, and takes on a broader meaning of maximizing the effectiveness of the business in meeting, or exceeding

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\* Faculty of Business Administration, Isra' University, Amman, Jordan. Received on 28/5/2007 and Accepted for Publication on 26/3/2008.

customer value expectations and using continuous improvement to drive business results. Considering it as a continuous improvement activity, constantly changes in accordance with organizational ability, expectations or environmental influences. It's a never ending journey to improve organization's performance.

### **The Core Themes of Excellence**

All excellence approaches are built on a set of core values, and concepts. These values and concepts form the foundation for long term improvement and excellence.

#### **• Results Focus**

Excellence is concerned with creating value for all the key stakeholders, including employees, customers, suppliers, and the community at large, as well as those with a financial interest in the firm.

#### **• Customer Focus**

The customer is the final judge of product quality and service delivery. Customer loyalty and retention are best achieved by understanding the current and future needs of current and prospective customers. Excellent firms comprehensively measure and achieve outstanding with respect to their customers.

#### **• Visionary Leadership**

A firm's leadership should set a clear direction and values for the firm, creating customer focus, and empowering the firm and its people in the pursuit of excellence are key to all excellence approaches. Excellence is visionary and inspirational leadership, coupled with alignment of purpose.

**• Strategic Management:-** All the excellence models stress the importance of strategic development.

**• Organizational Learning, innovation and improvement:-** Stimulating individual and organizational learning, innovation, and improvement through the effective sharing of knowledge and information is a critical element in an excellence approach. Excellence is challenging the status quo and effecting change by utilizing learning to create innovation and improvement opportunities.

**• People Focus:-** A firm's success is highly dependent upon the knowledge, skills, creativity and innovation of its people. This 'people potential' is best harnessed through shared values supported by a culture of trust and empowerment. Excellence is maximizing the contribution of employees through their development and involvement.

**• Partnership Development:-** Firms need to develop longer term strategic mutually beneficial partnership with

a range of external partners, including customers, suppliers and processes to meet customer requirements.

#### **• Fact-Based Process Management**

Processes are the 'engines' that deliver every firm's value proposition. The focus of all excellence approaches is on designing systematically managing processes on the basis of facts and improving processes on the basis of customer feedback and feedback from the process itself. Process capability is based on the ability of the firm's processes to meet customer requirements.

**• Social Responsibility:-** Responsibility to the public, ethical behavior and good citizenship are important in an excellence approach, and are critical to the longer-term interest of the organization. Excellence is exceeding the minimum regulatory framework in which the firm operates, and striving to understand and respond to the expectations of its stakeholders in the society.

### **The Problem of the Study**

In recent years Jordanian firms have been facing both various opportunities and challenges. Despite the adoption of different initiatives, studies show that Jordanian firms are still facing difficulties in measuring their overall performance. On the other hand, the early 1990s had witnessed the emergence of various models for assessing business excellence. These models were seen by the international firms as the best-practice models for performing self- assessment, benchmarking and, ultimately, delivering the improved performance.

In Jordan, we lack such a model, which could be used by large industrial Jordanian firms as a self - assessment tool in their journey to excellence. In the light of this problem, this research project was launched for the purpose of developing and testing a conceptual causal model for assessing business excellence, which was built upon the same core concepts, and principles of most popular international business excellence approaches.

### **This Study Incorporates Following Questions:**

1. What are the criteria of business excellence?
2. How business excellence can be assessed?
3. Does the business excellence driver (leadership) affect business results in large industrial Jordanian firms?
4. Does the business excellence driver (leadership) affect enablers?
5. Do business excellence enablers, namely strategic

management, resources, process, and customers focus affect business results in large industrial Jordanian firms?

### Study Objectives

**First:** To develop and test a model for assessing business excellence that includes multi-dimensional excellence criteria embodied in different international business excellence theories and models.

**Second:** To analyze the effect of the driver of the model (leadership) on both business enablers, and business results.

**Third:** To develop an analytical model, which could be used as a self assessment tool by large Jordanian industrial firms, which enables them to continuously measure and monitor where are they on the path to excellence, identifying their gaps, and stimulating solutions.

### Hypotheses

The hypothesis of the study can be classified into three main groups as follows:

#### Group (A) deals with the effect of model's driver (leadership) on enablers

First Hypothesis (H01): There is no statistically significant effect of driver (leadership) on enablers.

Second hypothesis (H02): There is no statistically significant influence of leadership on different enablers as follows:

H02a: There is no statistically significant effect of leadership on strategic planning.

H02b: There is no statistically significant effect of leadership on resources management.

H02b1: There is no statistically significant effect of leadership on human resources management.

H02b2: There is no statistically significant effect of leadership on financial management.

H02b3: There is no statistically significant effect of leadership on materials management.

H02b4: There is no statistically significant effect of leadership on information management.

H02c: There is no statistically significant effect of leadership on customer focus.

H02d: There is no statistically significant effect of leadership on process management.

#### Group (B) deals with the impact of model's driver (leadership) on business results

H0.1: There is no statistically significant influence of

leadership on business results.

H02: There is no statistically significant effect of driver (leadership) on different business results as follows:

H02a: There is no statistically significant effect of leadership on financial results.

H02b: There is no statistically significant effect of leadership on personnel results.

H02c: There is no statistically significant effect of leadership on customer's results.

H02d: There is no statistically significant effect of leadership on process results.

H02e: There is no statistically significant effect of leadership on society results.

#### Group (C) deals with the impact of enablers on business results

H01: There is no statistically significant effect of enablers on business results.

H02: There is no statistically significant effect of different enablers on business results.

H02a: There is no statistically significant effect of strategic planning on business results.

H02b: There is no statistically significant effect of resources on business results.

H02c: There is no statistically significant effect of resources on business results including:

H02c1: There is no statistically significant effect of personnel management on business results.

H02c2: There is no statistically significant effect of financial management on business results.

H02c3: There is no statistically significant effect of materials management on business results.

H02c4: There is no statistically significant effect of information management on business results.

H02d: There is no statistically significant effect of customer focus on business results.

H02e: There is no statistically significant effect of process management on business results.

## 2. CONCEPTUAL FRAMEWORK

The proposed Excellence Assessment Model for Jordanian Businesses in short (**EAMJB**), is established on the premise that "excellent results" with respect to financial results, customer satisfaction, personnel satisfaction, and impact on society are achieved through leadership driving strategic planning, people management, customer and market focus, resources and process management. In other words, excellent results are

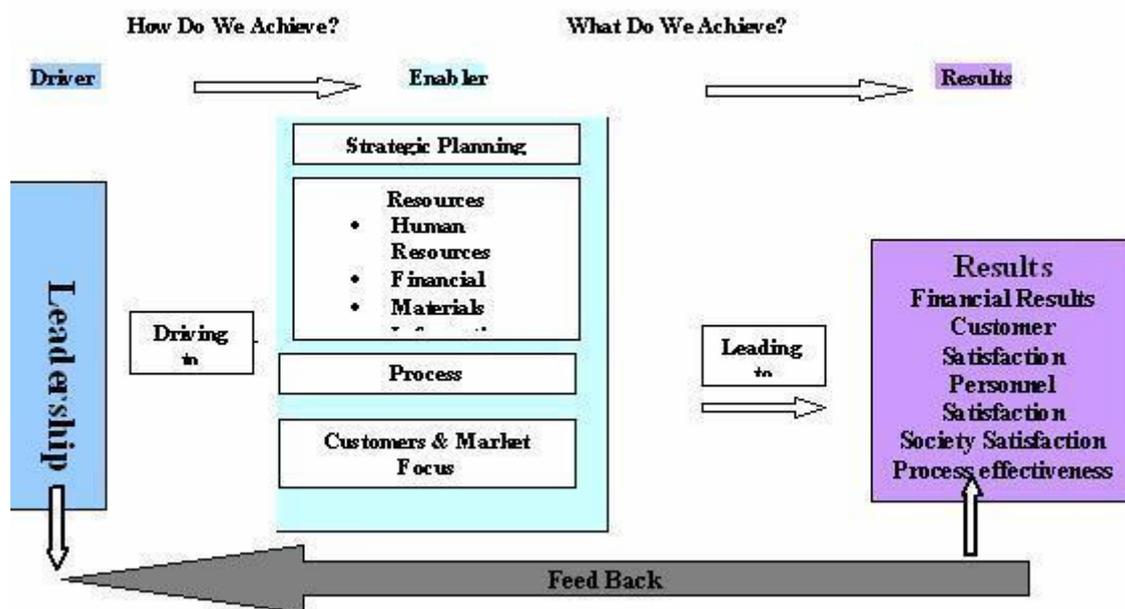
achieved by adopting and implementing good leadership, the enablers, and good results would naturally follow.

The proposed research's model includes three interrelated dimensions:

**First Dimension: Leadership (Driver of the model).** As shown in the first block of figure (1), business excellence does not come from just anywhere. It is derived by the

firm's leadership. In this proposed model, leadership is not just as one more criteria, it is the driver of the model, and is responsible for driving the firm in every area towards excellence. Leadership is considered the driver for the business excellence, and plays the key role in the proposed causal model. Without it any causal relationship among other categories becomes meaningless.

Figure (1) the Excellence Assessment Model for Jordanian Businesses (EAMJB)



**Second Dimension: Enablers**

Enablers are made up of several interrelated criteria which correspond to the key areas that must perform well if a firm is to succeed. This study, as seen at Figure (1), will focus on studying four enablers, and study their relationships to leadership (driver), and the business results. Research's enablers include the following: strategic management, customers, process management and resources including: personnel, financial, material resources, and information.

**Third Dimension: Business Results**

Business results are the outcomes from overall organizational achievements. This study, as shown in the third block of Figure (1), will focus on selecting balanced business results covering the performance of the firm, and representing five key business areas. These key areas are:

customer-focused results, financial results, personnel results, process results, and social responsibility results.

**Operational Definitions**

**Leadership variable:** A series of key areas reflecting the approaches and deployment that excellent firms will have in place.

It includes the following aspects: senior executive leadership direction, organizational performance review, the reinforcing of a culture of excellence, public responsibility and citizenship, and champion organizational change. It was measured by 22 items (section 1.1-1.5 of the questionnaire).

**Strategic Management variable:** A series of key areas reflecting the approaches and deployment that excellent firms will have in place. It includes five sub-criteria which are: external environmental analysis,

internal environmental analysis, strategy development, strategy deployment, and evaluation and control. It was measured by 23 items (section 2.1-2.4 of the questionnaire).

**Resources Management variable:** A series of key areas reflecting the approaches and deployment that excellent firms will have in place. It includes four sub-variables: human resources, information resources, financial resources, and material management. Human resources was measured by 34 items, information was measured by 12 items, financial management criteria was measured by 7 items, and material management criteria was measured by 6 items (section 3.1-3.4 of the questionnaire).

**Customer and Market Focus variable:** A series of key areas reflecting the approaches and deployment that excellent firms will have in place. It includes three sub-criteria: customer requirements, customer relationship, and customer satisfaction. It was measured by 13 items (section 4.1- 4.3 of the questionnaire).

**Process management variable:** A series of key areas reflecting the approaches and deployment that excellent firms will have in place. It included three sub-variables (sub-criteria): process development, innovation process, and supplier and partnering process. It was measured by 18 items (section 5.1-5.3 of the questionnaire).

**Business Results:** These are the outcomes from the overall firm's achievements. This concerns what the firm has achieved and is achieving through its leadership and enablers. It reflects the actual financial results, and the actual level of satisfaction of both external and internal customers. It was measured by 15 business area items (section 4 of the questionnaire)

#### **Business Excellence Assessment Process**

The excellence assessment will be on the basis of the approaches (methods, and processes used to address the sub-criterion), the deployment of approaches that excellent firms will have in place, and results achieved. Excellence assessment scale includes 7 levels, ranges from 1 to 7, where each level indicates the approaches, and the degree of the deployment of area of examination, and results achieved (from lowest-highest).

### **3. LITERATURE REVIEW**

**Porter and Tanner (2004)** viewed business excellence as the integration of all the excellence tools and techniques together, and a business must practice a

repeating Doming cycle of the continuous improvement cycle (Plan, Do, Check and Act.)

**Farrar (2004)**, argued that the secret to success for excellent firms that, they have a keen understanding of their purpose, both now and in the future, connect their purpose and mission to all key stakeholders, and share common visions.

Also, excellent firms have innovative strategies for income generation. Taking well-calculated risks and responsive to constituents needs. Where pointed the following four factors as keys to success: stakeholders, process, resources, and organization.

**Kanji and Moura, (2001)**, presented a conceptual model incorporating different leadership's critical success factors. the conceptual leadership excellence model, included a set of critical success factors (values, vision, mission, strategy, and key issues), where firm's values considered the foundation for the vision, mission, strategy and other key issues. Research results showed that the firm's values (prime) have a strong causal connection with the other four critical success factors. Of course, the way those factors are developed and implemented will determine the quality of the leadership in the firm.

**Dahlgard (1999)**, in his research, the cornerstones of business excellence, indicated '4 Ps' that a company must focus on in order to achieve excellence including: - People; Partnerships; Processes of work; and Products.

This means that excellent employees together with excellent partners through excellent processes create excellent products. Therefore, the main driver of excellence is thus the employees of the firm.

**The American General Accounting Office (1991) as cited in (Porter and Tanner, 2004)**, reviewed twenty firms that were among the highest-scoring applicants in the 1988 and 1989 Baldrige award process. The overall summary concluded that: Companies that adopted business practices experienced an overall improvement in corporate performance. In most cases companies achieved better employee relations, higher productivity, greater customer satisfaction, increased market share and improved profitability.

**Peters and Waterman (1982)** reported a series of case studies of 43 high American -performing firms. The findings revealed the following eight excellence characteristics that reflected these firm's management values, and firm's culture:- Bias toward action, closeness to the customer, autonomy and entrepreneurship,

productivity through people, hands on, value driven, sticking to the knitting, simple Form, Lean Staff, and simultaneous loose-tight properties.

#### 4. POPULATION AND SAMPLE OF THE STUDY

Large industrial firms working in Jordan, and registered in the Ministry of industry and Trade represent the population of this study. The “capital” was used as the criteria against which firms were judged as being large or small. After lots of thinking, as well as general investigation of the firms active in the different economic sectors, specifically in the industrial sector, the researcher decided that a capital size of JD 1,000,000 is the acceptable threshold (dividing line) in Jordan. A computer list of all Jordanian industrial companies with registered capital exceeding the JD 1,000,000 threshold was obtained from both the Ministry of Industry and Trade and the Chambers of Industry. The final list containing 172 firms showing the distribution of the research population was produced A stratified –random sample of 119 firms representing (69%) of the whole population constitutes the sample of the empirical study. The unit of the analysis in this study is the firm.

#### 5. METHODOLOGY

This study utilized both primary and secondary methods of data collection. A questionnaire (assessment tool) consists of a seven point scale, which reflected the approaches (none innovative), and the deployment (none-all key) of the approaches of key business areas (criteria) in large industrial Jordanian firms, as well as the business results (none- met target) achieved. The survey questionnaire was distributed to 119 firms, which 108 questionnaires were approved.

To check reliability of the questionnaire, a pilot test was conducted by distributing questionnaires to 35 large Jordanian industrial firms. Of these, 30 firms returned the surveys, giving a response rate of 85, the pilot study Cronbach Alphas ranged from 0.84 to 0.95, thus establishing the reliability of the survey questionnaire.

As for the validity, the requirements for validity are met. The content validity is met since research instrument was constructed after completing a comprehensive and exhaustive literature review covering different articles, papers, reports, and books. A review of similar research instruments was also conducted. The research instrument

was also subject to evaluation by some academicians and practitioners before it was actually administered.

#### 6. RESULTS AND DISCUSSION

Hypotheses were tested using simple and multiple linear regressions. Hypotheses were divided into the following three groups:-

##### **Group (A): Deals with the effect of model’s driver (leadership) on enablers**

First Hypothesis (H01): There is no statistically significant influence of leadership on enablers.

The null hypothesis is rejected. The alternative hypothesis is accepted, proving that there is a statistically significant effect of leadership on enablers.

Second hypothesis (H02):- There is no statistically significant influence of leadership on each component of enablers.

The null hypothesis is rejected.

The alternative hypothesis is accepted, proving that there is a statistically significant effect of leadership on each enabler.

##### **Group (B): Deals with the effect of Leadership (driver) on business results.**

##### **First Hypothesis: There is no statistically significant influence of leadership on business results.**

The null hypothesis is rejected. The alternative hypothesis is accepted, proving that there is a statistically significant effect of leadership on business result. As regards, influence of driver (leadership) on each component of business results. Results indicated that there is statistically significant effect of leadership (driver) on each component of the business results.

It was clear from the previous statistical results that, there is a significant influence of leadership on each component of the enablers block, as well as positive effect of leadership on each component of the business results block. Thus, the causal relationships were justified.

Also, analysis of this data has provided some fascinating insights into the relationship between driver (leadership) and how they impact enablers, and business results.

Nearly, 8 potential relationships between leadership and 8 categories of enablers have been investigated. In total 6 strong and significant correlations ( $0.7 < r < 0.9$ ) were between leadership and categories of enablers, and 2

moderate and significant relationships ( $0.4 < r > 0.7$ ). It is believed that so many moderate to strong relationships were identified. Also, nearly, 5 potential relationships between leadership and 5 categories of business results have been investigated. In total 1 strong and significant correlations ( $0.7 < r < 0.9$ ) were between leadership and categories of enablers, and 4 moderate and significant relationships ( $0.4 < r > 0.7$ ). It is believed that so many moderate to strong relationships were identified.

This above mentioned results, confirm the previous mentioned researches results, which showed positive effect of leadership on strategic management, deployment of resources, customer relationship and satisfaction, and process management. As well as, better employee relations, higher productivity, greater customer satisfaction, increased market share and improved profitability. Therefore, researcher believes that she has the reasons to believe that leadership has a significant impact on both enablers, and business results. In other words, improving leadership will strengthen each component of enablers block. And, will have a positive impact on each component of the business results block.

**Group (C): Deals with the effect of enablers on business results.**

**H01: There is no statistically significant influence of enablers on business results** The null hypothesis is rejected. The alternative hypothesis is accepted, proving that there is a statistically significant effect of enablers on business results. Moreover, results indicated that there is statistically significant effect of most components of enabler on business results. Where, it was found no statistically significant effect of process management on business results.

It was clear from the previous statistical analysis results that, there is a significant influence of each component of enablers' block on business results thus, the causal relationships were justified.

This result shows the positive effect of the development and deployment of strategic management, resources management, customer focus, and the process management on firm's performance.

Also, analysis of this data has provided some fascinating insights into the relationship between different business enablers and how they impact business results. Nearly 7 potential relationships between 7 categories of enablers and business results have been investigated. In total 5 strong and significant correlations ( $0.7 < r < 0.9$ ) were between enablers and business

results, and 2 moderate and significant relationships ( $0.4 < r > 0.7$ ). It is believed that so many moderate to strong relationships were identified. Confirms previous studies results, which shows that firms adopted business excellence models, in most cases achieved better employee relations, higher productivity, greater customer satisfaction, increased market share and improved profitability.

Thus confirms the prior theory of EAMJB that enablers effect business results

## 7. CONCLUSION AND RECOMMENDATION

1. The EAMJB proved to be a valid and reliable assessment tool capturing the multi-dimensional nature of business criteria used as a diagnostic tool for assessing the current health of the firm.
2. The prior theory of this causal model that leadership is the driver of the enablers (which creates results) is confirmed. Results show the driver (leadership) has a strong influence on enablers and business results. The result is consistent with recent theories on leadership and international business excellence models.
3. Leadership has a direct impacts and indirect influences (through the enablers) on business results. Confirming the prior theory of JBEAM that leadership is the driver of the model.
4. This model represents an excellent model for assessing business excellence, which can predict results expected through various system paths (enablers). It points out the directions likely to lead to success in achieving firm goals. It demonstrates being an excellent leader is not enough to produce a good result without good business enablers also employed.
5. Results show a positive linear relationship between the driver of the model (leadership) and each component of the firm's enablers. Demonstrating a moderate to strong relationship between leadership and each component of the enablers.

Lastly, JBEAM is confirmed to be a holistic, generic, and a non prescriptive framework, provides a multi perspective view of performance, combining financial and non financial resources and the assessment of different stakeholders.

## RECOMMENDATION

1. The researcher believes firms could benefit from

applying the model as a diagnostic tool for assessing the current health of the firm, benchmarking, and to be used as a preparatory tool before applying to King Abdullah II Award of excellence.

2. Firms should depend on balanced measures representing different stakeholder perspective both

internally and externally.

3. Researched business excellence areas are not the only areas effecting business excellence. Other research projects could study the impact of the firm's: culture, know-how, structure, and knowledge management.

**Annex -1-**

**Business Excellence Assessment Tool**

**Questionnaire**

**Section 1. Firm Profile**

**A. Name of the firm**

**B. Age of firm (years in business)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Less than 9 years   | 2. <input type="checkbox"/> From 10 to 19 y     |
| 3. <input type="checkbox"/> From 20 to 29 years | 4. <input type="checkbox"/> From 30 to 39 years |
| 4. <input type="checkbox"/> From 40 to 49 years | 5. <input type="checkbox"/> Above 50            |

**C. Industrial Sector:**

- |   |  |   |
|---|--|---|
| 1. <input type="checkbox"/> Drugs & Cosmetics             | 2. <input type="checkbox"/> Plastic & Rubber | 3. <input type="checkbox"/> Chemical Industries     |
| 4. <input type="checkbox"/> Printing & Paper              | 5. <input type="checkbox"/> Packaging        | 6. <input type="checkbox"/> Construction            |
| 7. <input type="checkbox"/> Agricultural business         | 8. <input type="checkbox"/> Mining           | 9. <input type="checkbox"/> Engineering             |
| 10. <input type="checkbox"/> Textiles, & leather Products | 11. <input type="checkbox"/> Food Processing | 12. <input type="checkbox"/> Wood & Metal Furniture |

**D. Please identify the post you currently occupy**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Chief Executive Officer        | 2. <input type="checkbox"/> Senior Human resources manager |
| 3. <input type="checkbox"/> General administrative Manager | 4. <input type="checkbox"/> Senior Financial Manager       |
| 5. <input type="checkbox"/> Other post _____               |  |

**Section 2. Instructions for following section**

Please express your professional opinions regarding the sentences in each of the following seven sections. Put "level" you think it is the most suitable to your opinion.

The following sentences are related to certain areas in the firm like leadership, strategic management, resources, processes, and customer focus

Level	1	2	3	4	5	6	7
<b>Approach</b>	<b>None</b>	<b>Reactive</b>	<b>Defined</b>	<b>Partially Systematic</b>	<b>Systematic</b>	<b>Systematic &amp; Integrated</b>	<b>Innovative</b>
<b>Deployment</b>	<b>None</b>	<b>Very Weak</b>	<b>Weak Less than 50% of keys</b>	<b>50% of the keys</b>	<b>Most of the keys 70%</b>	<b>Most of the keys 90%</b>	<b>100% of the keys</b>

<b>1. Leadership</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>1. Leadership</b>	<b>1.1 Senior Leadership direction</b>							
	1.1.1 Develop firm's philosophy and values focusing on adding value to key stakeholders							
	1.1.2 Develop a customer-oriented vision reflecting the firm philosophy							
	1.1.3 Develop a customer driven mission reflecting firm's products/services, learning and innovation							
	1.1.4 Communicate purpose, vision, and values to employees							
	1.1.5 Communicate purpose, vision, and values to customers, suppliers/partners and other external partners							
	<b>1.2 Organizational Performance Review</b>							
	1.2.1 Review regularly organizational performance							
	1.2.2 Translate organizational review findings into continuous improvement and development							
	<b>1.3 Reinforce culture of excellence</b>							
	1.3.1 Create a learning culture in the firm							
	1.3.2 Demonstrate and reinforce as a role model							
	1.3.3 Commit to excellence in their behavior and day to day activities							
	1.3.4 Support staff and provide opportunities for them to try new ideas, experiment, innovate and take responsible risks							
	1.3.5 Encourage and reinforce team work in creating new ideas.							
	1.3.6 Develop Programs for recognition of teams and individuals for their contributions in performance improvement							
	<b>1.4 Public responsibility and Citizenship</b>							
	1.4.1 Develop a well-defined policy, goals in relation to its contribution to the community in which it operates							
	1.4.2 Develop a well-defined policy, goals in relation to its contribution to the environment							
	1.4.3 Adopt programs to involve employees in achieving its public responsibility							
	<b>1.5 Champion organizational change</b>							
	1.5.1 Identify need for change and development							
	1.5.2 Communicate need to change, and change process to all staff							
	1.5.3 Evaluate and improve the change process							
1.5.4 Develop a plan to Identify , analyze and manage driving, and resistance forces for change								
1.5.5 Involve staff in all change process								
1.5.6 Secure investment and resources needed for change								

<b>2.Strategic Management</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>2. Strategic Management</b>	<b>2.1 External Environmental Analysis</b>							
	2.1.1 Collect information related to external political, economical, and social environments of the firm.							
	2.1.2 Collect information related to current and prospective customers and markets of the firm, the customers' needs, requirements and expectations							
	2.1.3 Collect information related to current and prospective competitors of the firm Strengths and weaknesses of those competitors identified							
	2.1.4 Collect information related to current and prospective suppliers of the firm identified, their strengths and weaknesses of those suppliers identified							
	2.1.5 Identify opportunities, challenges and anticipates risks that might face the organization							
	<b>2.2 Internal Environmental Analysis</b>							
	2.2.1 Collect information related to the firm's resources capabilities and its capacity.(strategic capability)							
	2.2.2 Identify firm's strength , and weaknesses							
	<b>2.3 Strategy Development area</b>							
	<b>2.3.1 Objectives</b>							
	2.3.1.1 Set strategic SMART (Specific, Measurable, Achievable, Relevant, Time Bound) objectives							
	2.3.1.2 Develop strategic objectives address the key challenges, and achieve balance between all stakeholders needs							
	2.3.1.3 Develop balanced set of long and short term objectives							
	<b>2.3.2 Strategy is Developed</b>							
	2.3.2.1 Develop a strategy based on matching firm's activities to the environment in which it operates t (strategic fit)							
	2.3.2.2 Develop a strategy based on the resources and competences of the firm to create new opportunities (strategic stretch)							
	2.3.2.3 Develop a strategy based on present and future needs and expectation of key stakeholders							
	2.3.2.4 Develop short and long-term strategies to achieve all set objectives							
	2.3.2.5 Involve people in the strategy development process							
	<b>2.3.3 Strategy is implemented</b>							
	2.3.3.1 Develop action plan aligned with the adopted strategies							
	2.3.3.2 Allocate resources to ensure effective implementation to the plan (financial, non financial)							
2.3.3.3 Develop a time –schedule for implementation								
<b>2.4 Evaluation and Control</b>								
2.4.1 Follow up the execution of the plan								

2.4.2	Develop key performance measures/indicators used to track performance against plan							
2.4.3	Compare achieved with the planned results							
2.4.4	Take corrective actions in case of deviation within defined priorities and schedules							
2.4.5	Feedback to different related areas about evaluation results							

**3. Resources**

**3.1 Human Resources**

		1	2	3	4	5	6	7
	<b>3.1.1 Human resources Planning</b>							
	3.1.1.1 Develop human resource plans aligned to firm objectives							
	3.1.1.2 Study and analyze firm’s demand of personnel, experiences, and capabilities							
	3.1.1.3 Study and analyze firm’s existing personnel, experiences, and capabilities							
	3.1.1.4 Procedures taken to fill gap between needed and existing personnel							
	3.1.1.5 Review human resource plan regularly							
	3.1.1.6 Develop a computerized - based human resource information system							
	<b>3.1.2 Staffing</b>							
	3.1.2.1 Develop adequate and competent staffing system aligned to the firm’s objectives							
	3.1.2.2 Involve managers in providing the needed technical inputs from candidates							
	3.1.2.3 Develop a formal orientation program to the new staff members							
	<b>3.1.3 Personnel are trained and developed</b>							
	3.1.3.1 Develop a personnel development plan							
	3.1.3.2 Develop a training plan							
	3.1.3.3 link training and development plans to business strategy							
	3.1.3.4 Develop training plans based on needs assessment							
	3.1.3.5 Evaluate training results							
	3.1.3.6 Develop a budget for training and development programs							
	<b>3.1.4 Personnel performance and Rewards are managed</b>							
	3.1.1.1 Develop formal performance management system							
	3.1.1.2 Develop performance management system includes both individual and team performance							
	3.1.1.3 Develop performance appraisal processes foster open discussions and dialogue between supervisors and employees							
	3.1.1.4 Develop performance appraisal processes consider inputs ( behavior), and output( results) of employees							
	3.1.1.5 Develop performance appraisal processes including feedback to employees							
	3.1.1.6 Develop performance appraisal processes integrated with personnel development and training area							

	3.1.1.7 Introduce variety of rewards and incentive schemes to support corporate objectives								
	3.1.1.8 Communicate purpose, and objectives of performance appraisal to employees								
	3.1.1.9 Evaluate the validity of the performance and reward management processes at regular intervals								
	<b>3.1.5 Personnel are empowered and involved</b>								
	3.1.5.1 Develop programs to empower employees								
	3.1.5.2 Develop strategies to encourage employee involvement and commitment in improvement and innovation								
	3.1.5.3 Develop mechanisms to involve individual employees in improvement and innovation								
	3.1.5.4 Develop mechanisms to encourage self directed teamwork								
	3.1.5.5 Incentives for individuals and teams new ideas and continuous improvement								
	3.1.5.6 Assess the effectiveness of empowerment approaches periodically								
	<b>3.1.6 Personnel are Satisfied and cared for</b>								
	3.1.6.1 Develop employee's safety and wellbeing policy								
	3.1.6.2 Communicate employee safety and wellbeing policy to all employees								
	3.1.6.3 Prepare periodic reports for top level managers about work accidents								
	3.1.6.4 Assess the effectiveness of safety and well being programs periodically								

### 3.2 Financial Resources

		1	2	3	4	5	6	7
<b>Financial Resources</b>	<b>3.2.1 Financial planning and Monitoring</b>							
	3.2.1.1 Develop financial plan that is consistent with firm's strategic plan							
	3.2.1.2 Prepare and use budgets in planning							
	3.2.1.3 Develop financial internal control system according to international standards							
	3.2.1.4 Update and review financial plan regularly							
	3.2.1.5 Develop periodic control reports							
	3.2.1.6 Develop auditing training plan for financial controllers(auditors)							
	3.2.1.7 Assess the effectiveness of financial management programs periodically							
	<b>3.3 Materials Resources</b>							

<b>Material Resources</b>	3.3.1	Develop materials requirements plan based on firm's strategy							
	3.3.2	Develop purchasing transaction policies, and procedures							
	3.3.3	Purchasing transaction procedures							
	3.3.4	Develop procedures for handling, storage, protect, and deliver products through out the process							
	3.3.5	Develop procedures anticipating inventories demand							
	3.3.6	Establish a computerized based material system management							

**3.4 Information resource**

<b>Information Resources</b>	<b>3.4.1 Information are managed</b>								
	3.4.1.1	Select information to support daily operations							
	3.4.1.2	Select information to support decision making, and performance review							
	3.4.1.3	Select information to support long range planning							
	3.4.1.4	Makes needed and appropriate information available to employees, supplier/partners and customers							
	3.4.1.5	Use information technology to distribute and access data throughout the firm							
	3.4.1.6	Ensure that hardware and software are reliable, secure and user friendly							
	3.4.1.7	Ensure easy access of information by employees							
	3.4.1.8	Ensure the integrity, timeliness, reliability, security, accuracy, and confidentiality of information.							
	2.3.1.9	Evaluate and improve the management of information							
	<b>3.4.2 Comparison and benchmarking</b>								
	3.4.2.1	Develop criteria for selecting and benchmarking information to improve performance							
	3.4.2.2	Use comparative and benchmarking information to improve processes, set stretch goals, and/or encourage breakthrough improvements							
	3.4.2.3	Evaluate and improve the process for selection and use of comparative and benchmarking							

**4. Customer and Market Focus**

		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>C</b>	<b>4.1 Customer requirements are managed</b>							
	4.1.1 Segment markets and customers							

4.1.2 Determine current and future customer/ market requirements for each segment							
4.1.3 Analyze and incorporate requirements into strategic and improvement plans							
4.1.4 Evaluate and improve the process for determining customer requirements							
<b>4.2 Customer Relationship is managed</b>							
4.2.1 Provide customer with easy access to conduct business with the organization and make complains							
4.2.2 Set customer contact performance measures for employees in the response chain							
4.2.3 Set and deploy programs to motivate and retain customers							
4.2.4 Ensure customer complains are resolved and analyzed for improvement							
4.2.5 Train and empower employees to delight customers							
4.2.6 Evaluate and improve the customer relationship management process							
<b>4.3 Customer Satisfaction is managed</b>							
4.3.1 Gather and analyze information on customer satisfaction and retention							
4.3.2 Use the information to develop strategic and improvement plans							
4.3.3 Evaluate and improve the process of determining customer satisfaction							

**5. Process Management**

<b>5.1 Processes are improved, using innovation</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
5.1.1 Generate, gather and screen creative ideas from all sources							
5.1.2 Incorporate change/customer requirements in the new product/service design and introduction							
5.1.3 Incorporate new technology and knowledge in the new product/service design and introduction process							
5.1.4 Involve employees from various departments in the new product/ service design and introduction process							
5.1.5 Involve customers in the new product/ service design and introduction process							
5.1.6 Incorporate procedures for design validation in the new product/ service design and introduction process							
5.1.7 Design and introduce production and delivery processes for new product/service							
5.1.8 Evaluate and improve the innovation and design process							

	<b>5.2 Processes are improved and managed</b>							
	5.2.1 Identify key businesses and support process							
	5.2.2 Measure process performance and set targets							
	5.2.3 Analyze variances in process performance and take actions							
	5.2.4 Improve key processes for higher performance and customer satisfaction							
	5.2.5 Identify key processes linked to business and quality goals.							
	<b>5.3 External partnerships are managed</b>							
	5.3.1 Identify and select suppliers / partners who fit into the overall firm strategy							
	5.3.2 Communicate requirements to suppliers and partners							
	5.3.3 Assess suppliers and partners to ensure requirements are met (e.g. supplier audits, supplier rating and certification system).							
	5.3.4 Provide performance feedback to suppliers and partners							
	5.3.5 Improve capabilities of suppliers and partners to meet firm's requirements (e.g. training, joint planning, long-term agreements, incentives and recognition).							

**Section 4:- Business Results**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Results</b>	<b>None</b>	<b>Very Weak</b>	<b>Weak</b>	<b>Less than 50% of target</b>	<b>50% of target</b>	<b>70% of target</b>	<b>100% of target</b>

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
1. Results							
<b>1.1 Customer results</b>							
1.1.1 Customer satisfaction							
1.1.2 Customer relationship							
1.1.3 Customer requirements							
1.1.4 Comparisons of results with competitors or benchmarks within the industry and across industries							
<b>1.2 Financial results</b>							
1.2.1 ROI							
1.2.2 Economic value added							
1.2.3 Comparisons of results with competitors or benchmarks within the industry and across industries							
<b>1.3 Human resources results</b>							
1.3.1 Employee empowerment and involvement criteria							
1.3.2 Employee training and development criteria							
1.3.3 Employee satisfaction criteria							
1.3.4 Comparisons of results with competitors or benchmarks within the industry and across industries							

<b>1.4 Process results</b>							
1.4.1 Process planning							
1.4.2 Supplier and partner relationship							
<b>1.5 Society Results</b>							
1.5.1 Involvement in community and environment activities							
1.5.2 Comparisons of results with competitors or benchmarks within the industry and across industries							

**Annex-2-**

**1. The research Population**

The population of the research included the large Jordanian firms acting in the industrial sector. The “capital” was used as the criteria against which firms were judged as being large or small.

**Table 1. Large Jordanian Industrial Firms Per Economic Sector**

No	Sector	Number of Firms	Percentage
1.	Drugs and Cosmetics Medical and health supplies industries Cosmetics and perfumes	22	13
2.	Plastic and Rubber industries	6	3%
3.	Chemical industries	20	12%
4.	Engineering and Metal industries	14	8%
5.	Construction	29	17%
6.	Printing , Paper, carton, and stationary supplies	13	7%
7.	Supply and foodstuff industries	31	18%
8.	Textiles, Garments & Leather products	9	5%
9.	Packaging	7	4%
10.	Agricultural business	10	6%
11.	Mining and Quarrying industries	8	5%
12.	Wood and Metal Furniture	4	2%
<b>Total</b>		<b>172</b>	<b>100%</b>

**Table 2. the Sample Stratification**

No	Sector	Total	Percent	Percent x n	nj
1.	Drugs and Cosmetics Medical and health supplies industries Cosmetics and perfumes	22	13 %	0.13 x 119= 15.47	<b>15</b>
2.	Plastic and Rubber industries	6	3%	0.03 x 119= 3.57	<b>4</b>
3.	Chemical industries	20	12%	0.12 x 119= 14.28	<b>14</b>

4.	Engineering and Metal industries	14	8	$0.081 \times 119 = 9.68$	<b>10</b>
5.	Construction	29	17	$0.17 \times 119 = 20.23$	<b>20</b>
6.	Printing , Paper, carton, and stationary supplies	13	7	$0.07 \times 119 = 8.53$	<b>9</b>
7.	Supply and foodstuff industries	31	18	$0.18 \times 119 = 21.42$	<b>21</b>
8.	Textiles, Garments & Leather products	9	5	$0.05 \times 119 = 5.95$	<b>5</b>
9.	Packaging	7	4	$0.04 \times 119 = 4.76$	<b>5</b>
10	Agricultural business	10	6	$0.06 \times 119 = 7.14$	<b>7</b>
11	Mining and Quarrying industries	8	4.6	$0.046 \times 119 = 5.4$	<b>5</b>
12	Wood and Metal Furniture	4	2.4	$0.024 \times 119 = 2.76$	<b>3</b>
<b>Tota</b>		<b>172</b>	<b>100%</b>		<b>119</b>

Note : n = sample size, nj = Stratum size.

### 3. Reliability Test

**Table 3. Reliability test, Cronbach's Alpha for measures of variables**

Variable	Number of items	Value of Cronbach Alpha
leadership	22	.88
strategic management	21	.93
human resources	31	.94
Information resources	13	.92
financial management	9	.87
material management	7	.84
customer focus	14	.91
process management	22	.95
business results	16	.87

### Hypothesis Testing

#### Testing the hypothesis

In this research work, research hypothesis (as stated in section 1.6) are divided into to three groups. Where simple and multiple linear regression statistical techniques were selected to test the related hypothesis as follow:-

**Group (A): Deals with the effect of model's driver (leadership) on enablers**

**Group (B): Deals with the effect of model's driver (leadership) on business results**

**Group (C): Deals with the effect of model's enablers on business results**

Next is the result of hypothesis testing:-

**Group (A):**

Under this group, there were seven hypothesis tested. Each hypothesis identified effect of model’s driver (leadership) on each component of the enablers, including:-strategic management, resources management (human resources, financial resources, information resources, and material resources), customer focus, and process management.

**First Hypothesis (H01): There is no statistically significant influence of leadership on enablers**

Table (4) results show calculated F-value was (245.509) which is greater than tabulated F-value (3.92) with significance level of (0.000), which is less than (0.05). Therefore, the null hypothesis is rejected. The alternative hypothesis is accepted, proving that there is a statistically significant effect of leadership on strategic management

**Table 4. Regression Coefficients between Leadership (Driver) and Enablers**

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig	F calculated	F tabulated	Sig
	B	Std. Error	Beta					
Constant	-55.439	47.812		-1.160	0.249	245.509	3.92	.000
Leadership (L)	5.613	0.358	0.836	15.669	0.000			

And, by applying simple linear equation:-

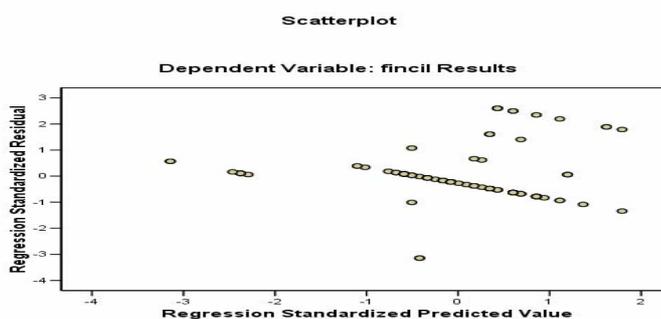
$$Y = \beta_0 + \beta_1 X_1 + E$$

$$Y = -55.439 + 5.613 (L) \dots\dots\dots 5.1$$

**Table 5. Correlation of Leadership and Enabler**

			Leadership	Strategic management
Spearman’s rho	Leadership	Correlation Coefficient sig (2-tailed) N	1.00 108	.875** 000 108
	Enablers	Correlation Coefficient sig (2-tailed) N	.875** .000 108	1.000  108

\*\* Correlation is significant at the .01 level (2-tailed).



**Figure (1) Residual plot of studentized residuals against Leadership for enablers**

**Second hypothesis (H02): - There is no statistically significant influence of leadership on each component of enablers block.**

**H02.1:- There is no statistically significant influence of leadership on strategic management.**

Table (6) results show calculated F-value was (293.285) which is greater than tabulated F-value (3.92) with significance level of (0.000), which is less than (0.05). Therefore, the null hypothesis is rejected. The alternative hypothesis is accepted, proving that there is a statistically significant effect of leadership on strategic management.

**Table 6. Regression Coefficients between Leadership and strategic Management**

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig	F calculated	F tabulated	Sig
	B	Std. Error						
Constant	-9.224	8.322		-1.108	.270	246.660	3.92	.000
Leadership (L)	1.014	0.062	0.845	16.268	.000			

And, by applying simple linear equation:-

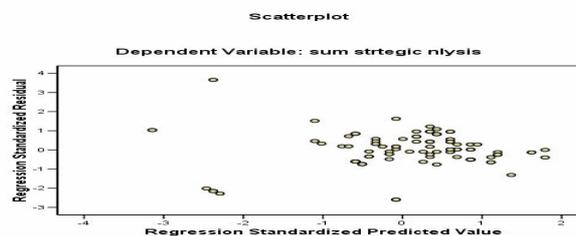
$$Y = \beta_0 + \beta_1 X_1 + E$$

$$Y = -9.224 + 1.014(L) \dots\dots\dots 5.2$$

**Table 7. Correlation of Leadership and Strategic Management**

			Leadership	Strategic management
Spearman's rho	Leadership	Correlation Coefficient sig (2-tailed) N	1.00 108	.760** 000 108
	Strategic management	Correlation Coefficient sig (2-tailed) N	.760** .000 108	1.000 108

\*\* Correlation is significant at the .01 level (2-tailed)



**Figure (2) Residual plot of studentized residuals against leadership for strategic management**

**H02.2: There is no statistically significant influence of leadership on resources management**

Table (5.18) results show calculated F-value was (192.775) which is greater than tabulated F-value (3.92) with significance level of (0.000), which is less than (0.05). Therefore, the null hypothesis is rejected. The alternative hypothesis is accepted, proving that there is a statistically significant effect of leadership on resources management.

**Table 8. Regression Coefficients between Leadership and Resources Management**

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig	F calculated	F tabulated	Sig
	B	Std. Error						
Constant	-36.256	28.360		-1.275	..204	192.412	3.92	.000
leadership	2.950	0.213	.803	13.884	.000			

a. Dependent variable: Resources

And, by applying simple linear equation:-

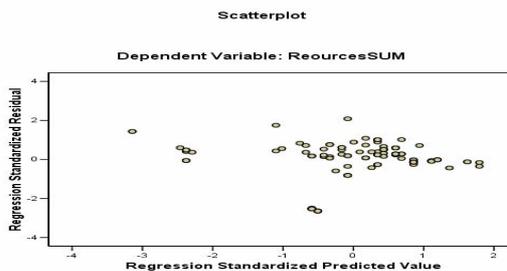
$$Y = \beta_0 + \beta_1 X_1 + E$$

$$Y = -36.256 + 2.950(L) \dots\dots\dots 5.3$$

**Table 9. Correlation of Leadership and Resources Management**

			Leadership	Resources
Spearman's rho	Leadership	Correlation Coefficient	1.00	.862**
		sig (2-tailed)		.000
		N	108	108
	Resources	Correlation Coefficient	.862**	1.000
		sig (2-tailed)	.000	
		N	108	108

\*\* Correlation is significant at the .01 level (2-tailed)



**Figure (3) Residual plot of studentized residuals against Leadership for resources**

As regards, the leadership influence on each component of the resources management. Results indicated the following:-

1. There is statistically significant effect of leadership on human resource management with F- value was (167.184), and a statistical significance of (0.000). With the following simple linear equation:-

$$Y = -25.908 + 1.557(L) \dots \dots \dots 5.4$$

**Table 10. Regression Coefficients between Leadership (Driver) and Human Resources Management**

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig.	F calculated
	B	Std. Error	Beta			
Constant	-25.908	16.074		-1.611	0.110	167.184
leadership	1.557	0.120	0.782	12.930	0.000	

a. Dependent variable: Human resources

2. There is statistically significant effect of leadership on financial management with F- value was (117.693), and a statistical significance of (0.000). With the following simple linear equation:- $Y = 10.883 + 0.338(L) \dots \dots \dots 5.5$

**Table 11. Regression Coefficients between Leadership (Driver) and Financial Resources Management**

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig.	F calculated
	B	Std. Error	Beta			
Constant	10.883	4.153		2.620	0.010	117.693
Leadership	0.338	0.031	0.772	10.849	0.000	

a. Dependent variable: :Financial resources mgt

3. There is statistically significant effect of leadership on information management with F- value was (126.907), and a statistical significance of (0.000). With the following simple linear equation:- $Y = -30.641 + 0.800(L) \dots \dots \dots 5.6$

**Table 12. Regression Coefficients between Leadership (Driver) and Information Management**

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig.	F calculated
	B	Std. Error	Beta			
Constant	-30.641	9.481		-3.232	0.002	126.907
Leadership	0.800	0.071	0.738	11.265	0.000	

a. Dependent variable : Information resources

4. There is statistically significant effect of leadership on materials management with F- value was (129.757) and a statistical significance of (0.000). With the following simple linear equation:- $Y = 9.404 + 0.255 (L)$ .....5.7

**Table 13. Regression Coefficients between Leadership (Driver) and Materials Management**

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig.	F calculated
	B	Std. Error	Beta			
Constant	9.404	2.989		3.146	0.002	129.757
Leadership	0.255	0.022	0.742	11.391	0.000	

a. Dependent variable : Materials

To make sure of the above mentioned result, correlation test is used. As shown in (table 5.24), result indicated that there is a strong relationship between the leadership and each component of the resources management. The strongest correlation was found between driver (leadership) of the model and information management.

**Table 14. Correlation of Leadership and Resources Components**

		Correlation Coefficient			
		Human Resources	Financial Resources	Information	Materials
Spearman's rho	Leadership	.862**	.670**	.865**	.621**

\*\* Correlation is significant at the .01 level (2-tailed)

This quite makes sense. Many Jordanian firms today face more vigorous competition than ever before. To be successful against such competition has to make good use of information and to respond quickly and appropriately. In other words, building a good information system is critical to successful leadership.

**H02.3: There is no statistically significant influence of leadership on customer and market focus**

Table (5.25) results show calculated F-value was (139.160) which is greater than tabulated F-value (3.92) with significance level of (0.000), which is less than (0.05). Therefore, the null hypothesis is rejected. The alternative hypothesis is accepted, proving that there is a statistically significant effect of leadership on customer and market focus.

**Table 15. Regression Coefficients between Leadership and Customer and Market Focus Management**

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig	F calculated	F tabulated	Sig
	B	Std. Error	Beta					
Constant	7.063	6.665		1.060	0.292	139.160		0.000
leadership	0.589	0.050	0.753	11.797	0.000			

a. Dependent variable: resources

And, by applying simple linear equation:-

$$Y = \beta_0 + \beta_1 X_1 + E$$

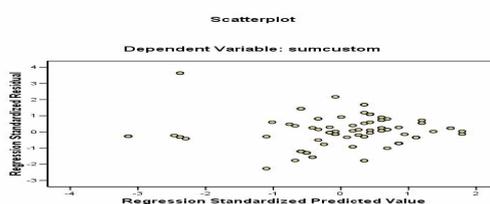
$$Y = 7.063 + 0.589 (L) \dots\dots\dots 5.8$$

**Table 16. Correlation of Leadership and Customer Focus**

			Leadership	Resources
Spearman's rho	Leadership	Correlation Coefficient	1.00	.737**
		sig (2-tailed)		.000
		N	108	108
	Customer and Market focus	Correlation Coefficient	.737**	1.000
		sig (2-tailed)	.000	
		N	108	108

\*\* Correlation is significant at the .01 level (2-tailed)

It was also found (figure 5.4) that there is very little or no pattern in the relationship between the residual and the value of independent variable (leadership). This means that the fitted regression model is appropriate for the set of data being studied.



**Figure (4) Residual plot of Studentized Residuals against Leadership for Customers Focus**

**H02.4: There is no statistically significant influence of leadership on Process management.**

Table (5.27) results show calculated F-value was (136.293) which is greater than tabulated F-value (**3.92**) with significance level of (0.000), which is less than (0.05). Therefore, the null hypothesis is rejected. The alternative hypothesis is accepted, proving that there is a statistically significant effect of leadership on process management.

And, by applying simple linear equation:-

$$Y = \beta_0 + \beta_1 X_1 + E$$

$$Y = -20.885 + 1.131 (L) \dots \dots \dots 5.9$$

**Table 17. Regression Coefficients between Leadership and Process Management**

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig	F calculated	F tabulated	Sig
	B	Std. Error	Beta					
Constant	-20.885	<b>12.931</b>		-1.615	0.109	136.293	<b>3.92</b>	<b>0.000</b>
leadership	1.131	<b>0.097</b>	<b>0.750</b>	11.674	0.000			

a. Dependent variable: Process management

**Explanation:-**This means that for each increase of one unit of leadership, the average value of process management is estimated to increase by 1.131. In other words, for each increase in degree of leadership's excellence, the process management degrees of excellence are estimated to increase by 1.131

Moreover, by looking at the correlation coefficient determined by SPSS in table (5.28), it takes value of 0.854, implying a strong positive relationship between the leadership and the process management Where 85.4% of variations in process management, can be explained by variations in leadership.

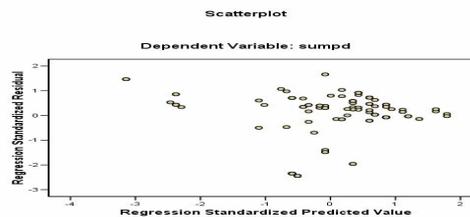
As, the positive sign of **Beta** indicates a direct proportional relationship between the independent variable (leadership) and the dependent variable (process).

**Table 18. Correlation of Leadership and Process Management**

			Leadership	Resources
Spearman's rho	Leadership	Correlation Coefficient	1.00	.854**
		sig (2-tailed)		.000
		N	108	108
	Process Management	Correlation Coefficient	.854**	1.000
		sig (2-tailed)	.000	
		N	108	108

**\*\* Correlation is significant at the .01 level (2-tailed)**

It was also found (figure 5.5 that there is very little or no pattern in the relationship between the residual and the value of independent variable (leadership). This means that the fitted regression model is appropriate for the set of data being studied.



**Figure (5) Residual plot of Studentized Residuals against Leadership for Process Management**

**4.3.1.2 Group (B): Deals with the effect of Leadership (driver) on business results**

Under this group, there were 5 hypothesis tested. Each hypothesis studied the effect of leadership on each component of business results block (financial, customer, process, personnel, and society)

**First Hypothesis: There is no statistically significant influence of leadership on business results.**

Table (5.29) results show calculated F-value was (280.780) which is greater than tabulated F-value (3.92) with significance level of (0.000), which is less than (0.05). Therefore, the null hypothesis is rejected. The alternative hypothesis is accepted, proving that there is a statistically significant effect of leadership on business results.

**Table 19. Regression Coefficients between Leadership and Business Results**

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig	F calculated	F tabulated	Sig
	B	Std. Error	Beta					
<b>Constant</b>	<b>25.866</b>	<b>4.219</b>		6.130	<b>0.000</b>	<b>280.780</b>	<b>3.92</b>	<b>.000</b>
<b>leadership</b>	<b>0.530</b>	<b>0.032</b>	<b>0.852</b>	16.756	<b>0.000</b>			

a. Dependent variable: Business Results

And, by applying simple linear equation:-

$$Y = \beta_0 + \beta_1 X_1 + E$$

$$Y = -25.866 + 0.530 (L)$$

**Table 20. Correlation of Leadership and Business Results**

			Leadership	Resources
Spearman's rho	Leadership	Correlation Coefficient	1.00	.768**
		sig (2-tailed)		.000
		N	108	108
	Business Results	Correlation Coefficient	0.768**	1.000
		sig (2-tailed)	.000	
		N	108	108

**\*\* Correlation is significant at the .01 level (2-tailed)**

It was also found (figure 5.6) that there is very little or no pattern in the relationship between the residual and the value of independent variable (leadership). This means that the fitted regression model is appropriate for the set of data being studied.

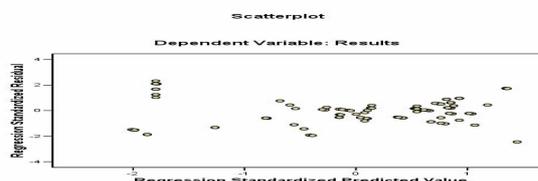


Figure (6) Residual Plot of Studentized Residuals against Leadership for Business Resources

As regards, influence of driver (leadership) on each component of business results. Results indicated that there is statistically significant effect of leadership (driver) on each component of the business results block as follow:

1. There is statistically significant effect of leadership on human resource results with F- value was (96.632) and a statistical significance of (0.000).

Table 21. Correlation of Leadership and Human Resources Management Results

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig.	F calculated
	B	Std. Error				
Constant	4.293	1.951		2.200	0.030	96.632
Leadership	0.144	0.015	0.691	9.830	0.000	

a. Dependent variable: Human Resources management results

2. There is statistically significant effect of leadership on financial results with F- value was (38.307) and a statistical significance of (0.000).
- 3.

Table 22. Regression Coefficients between Leadership and Financial Results

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig.	F calculated
	B	Std. Error				
Constant	11.767	1.053		11.175	0.000	38.307
leadership	0.049	0.008	0.515	6.189	0.000	

a. Dependent variable: Financial Results

4. There is statistically significant effect of leadership on process management results with F- value was (136.420) and a statistical significance of (0.000).

Table 23. Regression Coefficients between Leadership and Process Results

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig.	F calculated
	B	Std. Error				
Constant	2.163	1.337		1.617	0.000	136.420
Leadership	0.117	0.010	0.750	11.680	0.000	

a. Dependent variable: Process Results

5. There is statistically significant effect of leadership on customer focus results with F- value was (61.279) and a statistical significance of (0.000).

**Table 24. Regression Coefficients between Leadership and Customer Focus Results**

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig.	F calculated
	B	Std. Error	Beta			
Constant	9.519	2.013		4.730	0.000	61.279
Leadership	0.118	0.015	0.605	7.8282	0.000	

**a. Dependent variable: Customer Results**

5. There is statically significant effect of leadership on Society results with F- value was (125.346) and a statistical significance of (0.000).

**Table 25. Regression Coefficients between and Society Results**

Variable	Un standardized Coefficient		Standardized Coefficient	t	Sig.	F calculated
	B	Std. Error	Beta			
Constant	-1.876	1.218		-1.540	0.126	125.346
Leadership	0.102	0.009	0.736	11.196	0.000	

**a. Dependent variable: Society Results**

To make sure of the above mentioned result, correlation test is used; result in table (5.36) indicates that there is a strong relationship between leadership and each component of the business results block. The strongest correlation was identified between leadership and customer focus results.

**Table 26. Correlation of Leadership and Business Results**

		Correlation Coefficient				
Spearman's rho	Leadership	Human resources results	Financial results	Customers results	Process Results	Society Results
		.620**	.650 **	.710**	.530**	.521**

**\*\* Correlation is significant at the .01 level (2-tailed)**

This above mentioned result quite makes sense. Good business results cannot be derived without customer requirement being met. Where building a good customer base is critical to successful leadership.

**Group (C): Deals with the effect of enablers on business results**

Under this group, 7 hypotheses were tested. Each hypothesis studied the effect of each component of the enablers block on business results.

Multiple regression analysis was used to determine the nature and the strength of the relationship between the seven enablers and business results (dependent variable).

**H01: There is no statistically significant influence of enablers on business results**

Table (5.37) results show calculated F-value was (65.737) which is greater than tabulated F-value (2.01) with significance level of (0.000), which is less than (0.05). Therefore, the null hypothesis is rejected. The alternative hypothesis is accepted, proving that there is a statistically significant effect of enablers on business results. It was also found that there is very little or no pattern in the relationship between the residuals and the value of the each component of the independent enablers block. . This means that the fitted regression model is appropriate for the set of data being studied.

Moreover, results indicated that there is statistically significant effect of most components of enabler on business results. Where, it was found no statistically significant effect of process management on business results.

**Table 27. Regression Coefficients between Enablers and business results**

Model	Un standardized Coefficient		Standardized Coefficient	t	Sig	F calculated	F tabulated	Sig
	B	Std. Error	Beta					
<b>Constant</b>	<b>23.424</b>	<b>4.181</b>		5.602	0.000	<b>65.737</b>	<b>2.01</b>	<b>0.000</b>
Strategic Management(SM)	<b>0.332</b>	<b>0.044</b>	<b>0.640</b>	7.459	0.000			
Human resources management(HR)	0.118	0.015	0.605	7.8282	0.000			
Information management(IF)	0.210	0.099	.366	2.129	0.036			
Financial management(FM)	0.322	0.131	.241	2.454	0.016			
Materials management(MM)	0.789	0.115	.436	6.836	0.000			
Customers Focus(CF)	0.159	0.075	.200	2.110	0.037			
Process Management (PM)	<b>0.025</b>	<b>0.077</b>	<b>.061</b>	<b>.328</b>	<b>0.744</b>			

a. Dependent Variable: Business Results

And, by applying the multiple linear equations:-

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + E$$

$$Y = 23.424 + 0.332 SM + 0.118 HR + 0.210 IF + 0.322 FM + 0.789 MM + 0.159 CF + 0.025 PM$$

**Table 28. Correlation of Enablers and Business Results**

		Correlation Coefficient sig (2-tailed)
Spearman's rho	Enablers	Business Results
	Strategic Management(SM)	<b>0.816**</b>
	Human resources management(HR)	0.741**
	Information management(IF)	0.750**
	Financial management(FM)	0.640**
	Materials management(MM)	<b>0.634**</b>
	Customers Focus(CF)	0.759**
	Process Management (PM)	0.783**

\*\* Correlation is significant at the .01 level (2-tailed)

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