Strategic Orientations, E-Business Assimilation and Organizational Agility

التوجهات الإستراتيجية, استيعاب الأعمال الالكترونية وذكاء المنظمة

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Authorization

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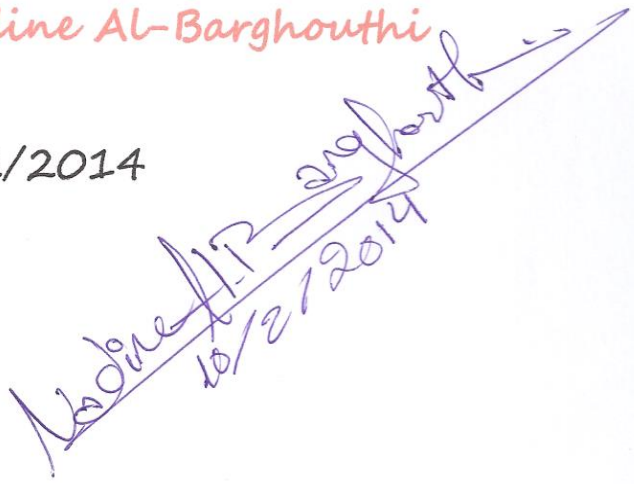

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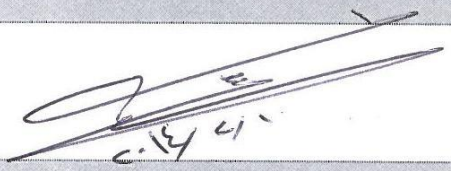
Dr. Soud Al-Mahamid	
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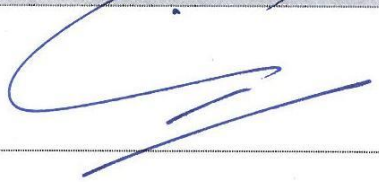
Dr. Hani Ertaimeh	

Dedication

I dedicate this work to my beloved & good caring parents.

To my sweet brothers.

To my entire lovely family.

To my supervisor Dr.Soud Al-Mahamid.

To my true friends and sisters; Rawan and Jumana**.**

Acknowledgement

All the credit and success is due to the Merciful Allah always and for ever.

Besides that, there won't be words can describe how grateful I am to the unconditional love & support of my lovely parents.

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Strategic Orientations, E-Business Assimilation and Organizational Agility

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ABSTRACT

This study aimed to examine the role of strategic orientation components in organizational agility in the light of e-business assimilation. Based on previous studies, we developed the research model to describe how strategic orientation components impact on organizational agility through the mediating role of e-business assimilation. This study followed a quantitative methodology by using a questionnaire tool; the study population was Jordanian Communication Companies. Based on data from 110 respondents from middle and high managerial level, we found that three components of strategic orientations (i.e., competitor orientation, customer orientation and innovation orientation) had a statistical influence on e-business assimilation, whereas cost orientation didn't have a statistical influence on e-business assimilation. Also results revealed that strategic orientation components have an indirect impact on organizational agility through e-business assimilation, while there was a direct impact between strategic orientation components and e-business assimilation; besides a direct impact between e-business assimilation and organizational agility.

التوجهات الإستراتيجية, استيعاب الأعمال الالكترونية, و ذكاء المنظمة

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الملخص باللغة العربية

هدفت هذه الدراسة لفهم دور التوجهات الإستراتيجية في ذكاء المنظمة من خلال استيعابها للأعمال الالكترونية. وبعد الاطلاع العميق على الأدبيات النظرية والدراسات السابقة, تم تطوير أنموذج البحث بطريقة توضح دور مكونات التوجهات الإستراتيجية في ذكاء المنظمة من خلال دور الوساطة الذي يمثله استيعاب الأعمال الالكترونية. ولتحقيق أهداف الدراسة, اتبعت الباحثة منهجية البحث الكمي باستخدام أداة الاستبيان لجمع البيانات من قطاع الاتصالات الأردني. وبناءً على استجابة 110 مدير من الطبقة الإدارية الوسطى والعليا, أهم ما توصلت إليه الدراسة إلى أن هناك دلالة إحصائية لكل من التوجهات الإستراتيجية التالية: التوجه نحو المنافسين, التوجه نحو الزبائن, والتوجه نحو الإبداع في التأثير على استيعاب الأعمال الالكترونية, بينما التوجه نحو التكلفة لم يكن له تأثير ذو دلاله إحصائية على استيعاب الأعمال الالكترونية. بالإضافةً إلى ذلك, توصلت الدراسة إلى وجود أثر غير مباشر بين التوجهات الإستراتيجية وذكاء المنظمة من خلال استيعاب الأعمال الالكترونية. وبالمقابل, وجود أثر مباشر بين كل من التوجهات الإستراتيجية واستيعاب الأعمال الالكترونية, وبين استيعاب الأعمال الالكترونية وذكاء المنظمة.

Chapter 1
Introduction

1.1 • Introduction

1.2 • Study Problem

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1.8 • Study Operational Definitions

1.1 Introduction

Strategic orientation is a strategic choice which provides dynamic capabilities in fast changing environments and makes firms capable for fast responding on those changes. Strategic orientation considered as a significant driver of superior performance in emerging economies (Zhou and Li, 2005). It reflects the firm capability to interact with external environments such as customers, competitors, technology, and how firms should perform their business (Zhou & Li, 2010). Being a strategic oriented firm, presents the ability to forecast any turbulence in the business environment, and this provide the ability to adapt with changes proactively.

Theodosiou, et al. (2012) put the spot light on the strategic orientation components which have the potential to create superior performance to firms. While customer orientation refers to the collection of intelligence about customers to satisfy their needs and wants, Competitor orientation refers to firm's ability to identify, analyze, and respond to competitors' actions (Cheng, et al., 2012). Moreover, innovation orientation is a strategic behavior that reflects the ability for creating new and innovative ideas and how to implement them to enhance the performance. In addition, cost orientation responsible for achieving efficiency in all parts of the value chain in order to decrease the output costs (Olson et al., 2005).

According to the above mentioned subject; E-business applications such as Electronic Customer Relationship Management (E-CRM), Enterprise Resource Planning (ERP), and Electronic Supply Chain Management (E-SCM) facilitate achieving all types of orientations. They provide the ability to extract and manage events of the external and internal business environment. They help in drawing road map for the decision makers to forecast future situation of market, competitors and customers. E-CRM, for example, allows companies to gather customer data swiftly, identify the most valuable customers over time, and increase customer loyalty by providing them with customized products and services (Rababah, et al., 2011). Moreover, supply chain management system covers the entire physical processes from obtaining the raw materials until the finished product reaches the end consumer. This system offers a real time tracking for the processes and can provide Just-In-Time strategy (JIT) for delivering items without spending storage costs. Thus, this system seeks to achieve superior performance by maximizing the operational efficiencies, and minimizing wasted time and costs. However, the problem here is not if we have those applications or we don't. In turbulent

business environment, firms desperately need intelligent applications that help in making an appropriate response in timely manner whenever they are facing change, uncertainty and unpredictable circumstances (Tseng, and Lin, 2011). That leads us to the question of firm's ability to harness and assimilate those applications as a mean to sense the business environment –whether its threats or opportunities- and respond intelligently and in timely manner to achieve a competitive advantage.

The core of this study was to examine the impact of strategic orientations (customer orientation, competitor orientation, innovation orientation and cost orientation) on E-business assimilation in order to enhance the ability of sensing the business threats and opportunities and how to respond proactively.

1.2 Study Problem

Business environment became more turbulent than ever before, that emphasize the urgent need for being strategic oriented firms to overcome dramatic, unexpected and unprecedented changes. On the other hand, this turbulence will be accurately managed by intelligent systems to guarantee an effective performance in a timely manner. Therefore, the research problem was presented through the following four main questions: **Q1:** Is there any impact of strategic orientation components on e-business assimilation in Jordanian Communication Companies? This question was divided into the following sub-questions:

1 - Is there any impact of customer orientation on assimilating e-business?

2 - Is there any impact of competitor orientation on assimilating e-business?

3 - Is there any impact of cost orientation on assimilating e-business?

4 - Is there any impact of innovation orientation on assimilating e-business?

Q2: Is there any impact of strategic orientation components on organizational agility?

Q3: Is there any impact of assimilating e-business on the organizational agility?

Q4: Is there any mediating role for e-business assimilation in the relationship between strategic orientations and organizational agility?

1.3 Study Purpose and Objectives

First: Study Purpose

This study aimed at examining the impact of strategic orientation components on organizational agility, in the light of e-business assimilation. Therefore, researcher worked at finding suitable answers for research questions, to serve academic and practical sectors.

Second: Study Objectives

The main objectives of this study were:

1. Shedding the light on how e-business can steer strategic orientations to superior performance.
2. Highlighting the great influence of e-business applications in the current turbulent environment.
3. Enhancing decision makers' ability to be agile through increasing the dependency on e-business applications.

1.4 Study Importance:

The importance of this study was to highlight how strategic orientations can achieve agility by harnessing e-business applications effectively in the Jordanian Communication Companies, and particularly the following points:

1- Enriching Arab Libraries with studies highlight the role of strategic orientations to improve the firm's capabilities in assimilating e-business applications.
2- Understanding how to enhance organizational agility through this study. Since this behavior became important for facing unpredictable and unprecedented changes in the current business environment.
3- Examining the experience of third world countries with e-business applications and how they are used to perform business processes.
4- Serving the interest of researcher in strategic issues and the revolution of e-business, and understanding how their combination creates innovation and superior performance.

1.5 Study Hypotheses:

Based on the prior studies, the study model has been developed and the study hypotheses were derived as follows:

The first main hypothesis (H01): There is no impact of the strategic orientation components on E-business assimilation at the Jordanian Communications Companies, at $\alpha \leq 0.05$, and this hypothesis can be divided into the following four sub-hypotheses:

H01.1 - There is no impact of the customer orientation on e-business assimilation, at $\alpha \leq 0.05$.

H01.2 - There is no impact of the competitor orientation on e-business assimilation, at $\alpha \leq 0.05$.

H01.3 - There is no impact of the cost orientation on e-business assimilation, at $\alpha \leq 0.05$.

H01.4 - There is no impact of the innovation orientation on e-business assimilation, at $\alpha \leq 0.05$.

The second main hypothesis (H02): There is no impact of strategic orientation components on organizational agility, at $\alpha \leq 0.05$.

Third main hypothesis (H03): There is no impact of e-business assimilation on organizational agility, at $\alpha \leq 0.05$.

Fourth main hypothesis (H04): There is no mediating role of E-business assimilation in the impact of strategic orientation components on organizational agility, at $\alpha \leq 0.05$.

1.6 Study Scope and Limitations:

First: Study Scope

1- Location Scope: The current study was conducted in Jordanian Communication Companies.

2- Respondents' Scope: The study targeted all managers working at middle and upper level management in Communications Companies.

3- Timeline Scope: This study was expected to be accomplished through the year (2013-2014).

Second: Study Limitations

1- Study results are restricted only to Jordanian Communication companies.

2- The quantity of collected data depended on employees' response to the questionnaires.

3- The study tool (questionnaire) measures the perception of the respondents but not reflecting the facts of the business environment.

4- The employees' response reflects the psychological influence about the company at that point of time.

1.8 Study Operational Definitions:

Strategic orientations: Guiding templates that help in steering business activities to achieve sustainability and competitive advantage.

Customer orientation: Strategic behavior that clarifies the firm's ability in positioning itself on customer's shoe to understand his needs and preferences to serve him in a superior way.

Competitor orientation: Strategic behavior that clarifies the firm's ability in putting itself on the competitor's shoe to understand his strategies, weaknesses, strengths and enables the firm to respond proactively to gain the competitive advantage.

Cost orientation: Strategic behavior that clarifies the firm's ability in maximizing the operational efficiencies and decrease the output costs.

Innovation orientation: Strategic behavior that clarifies the firm's ability in delivering new and innovative ideas which enhance the business and serve the customers.

E-business assimilation: The approval and expansion of using electronic business applications to deliver the strategic goals and to enhance the performance.

Organizational agility: Intelligent behavior that provides the firm with the ability to sense and respond to the changes in a timely manner.

In addition, these variables will be measured by the indicators that are shown in table.1

Variable	Indicators	References
Strategic Orientations -Customer Orientation	- Firm's objectives are driven primarily by customer satisfaction. - Firm's strategy for competitive advantage is based on its understanding of our customers' needs. -. Firm's market strategies are driven by its understanding of possibilities for creating value for its customers. -. Firm measures customer satisfaction systematically and frequently. -Firm pays close attention to after-sales service.	Cheng & Krumwiede, 2012
-Competitor Orientation	- The firm responds rapidly to competitive actions that threaten it. -Top management regularly discusses competitors' strengths and strategies. - The firm targets customers regularly to enhance the competitive advantage. - Salespeople regularly share competitors' information.	Cheng & Krumwiede, 2012
-Cost Orientation	- Firm seeks to improve the operational efficiency as a prior goal. - Firm seeks for achieving cost advantage. -. Cost is the most critical component in the firm's performance measures -. Cost issues always take a prior attention in any decision making process.	Grawe, et al., 2009
-Innovation Orientation	- The Firm pays close attention to innovation - Firm ensures the need of innovation for development - Firm supports the need of development and utilization of new resources.	Zhou, et al., 2005

Variable	Indicators	References
-E-business Assimilation	- Company is conscious about the importance of the internet to perform business. - E-Business applications enable information sharing among employees and among units. -. E-Business applications enable information sharing between existing and potential customers. - E-Business applications integrate all organization parts for a better customer service. - E-Business applications enable the creativity in the online marketing and advertising. - E-Business applications enable accomplishing transactions with customers through Internet. E-Business applications enable an integrated and accurate enterprise resources planning. - E-Business applications enhance the customer relationship management.	Li, et al., 2010
- Organizational Agility	- The firm collects detailed information about customers frequently. - The firm prepares future plans and demand forecasts related to its customers. - The firm has the capability to fit time, quantity, product mix, and way of distribution to customers' expectations. - The firm collects detailed information about its suppliers and service providers frequently. - The firm is able to exploit the resources and capabilities of suppliers to enhance the quality and quantity of products and services. - The firm collects information about its main competitors frequently. - The firm pays attention to the major concerns of its competitors. - A firm responds immediately to competitors' actions	Yang & Liu, 2012

Table.1

Chapter 2

Review of Related Literature and Previous Studies

2.1 • Introduction

2.2 • Background

2.3 • Review of Related Literature

2.4 • Review of Previous Studies

2.5 • Significant Features of the Study

2.6 • Study Model

2.1 Introduction

This chapter reviews the related literature and previous relevant studies. This includes related literature about strategic orientations, E-business assimilation and organizational agility. Moreover, it briefly reviews the background of Jordanian Communication Companies.

Later in this chapter, the study model was built based on the previous related studies.

2.2 Background

Zain Communication Company

Zain was first established in 1994; hence this company made a revolution in communication world by introducing GSM mobile services into the country by 1995. Zain quickly became one of the elite telecom companies in Jordan because of its long term plans and far sighted strategies of adopting the newest technologies in order to create added value for its' customers always. Moreover; Zain wasn't concerned only about being entrepreneurial in communication sector, but also concerned about investment in community development through the corporate social responsibility (CSR) program in the country. Zain offered number of distinctive features and services that guaranteed achieving continuous success to this company. It was the first Middle Eastern operator to launch MMS and mobile data services, Blackberry communication services and introduce WAP connectivity in Jordan. In addition, Zain was the first in the Kingdom to offer E-mail services and virtual wallet to serve customers by 2012. Moreover, in the same year Zain launched the high – speed Zain Broadband services through modern HSPA+ technology. The new cutting edge and user friendly service will offer unprecedented speed for mobile internet data services across all Jordanian governorates.

Zain Jordanian Company made number of prominent achievements from the beginning and even more after joining Zain Group (was known as Mobile Telecommunication Company (MTC)) in 2003, considering it the largest single acquisition in the Middle East and the largest private sector investment in Jordan at the time (www.jo.zain.com).

Orange Communication Company

Orange company started in 1999 when granting Petra Jordanian Mobile Telecommunications license to provide mobile services. It was known then as Jordan

Telecom Group (JTG) until they adopted the brand of France Telecom Group (Orange) in 2007.

Jordan Telecom Group (JTG) plays a prominent role in the information and communications technology sector, since it provides fixed telephone lines, mobile, and internet services constitutes the real base for the Kingdom's telecommunications backbone and enhance the integration within regional countries and world wide countries. Since then, Orange Jordan is known by offering comprehensive services at affordable prices like offering 3G+ network, which made Orange Jordan the exclusive mobile operator in Jordan authorized to provide 3G+ services in the local market. Additionally, in 2009, Orange launched the Information Security Operation Center to provide imperative managed security services which enables the company to compete with global security centers. Moreover; JTG always concerned about establishing business goals that seek to achieve sustainable development in the Kingdom through reconciling growth and competitiveness with its commitment to social development and the improvement of the quality of life for future generations. The Group now serves more than 2.9 million customers with cutting edge technologies offered at highly affordable prices (www.orange.jo).

Umniah Jordanian Company

Umniah was officially launched on 2005 and it's subsidiary of Batelco Bahrain. It has positioned itself as a successful operator in Jordanian telecommunications, offering high quality integrated services, including mobile, Internet, and business solutions, for the best value and at the cutting edge of industry developments. In short period, Umniah was able to develop itself and extending its wireless internet services to reached 80% or Jordanian population. In addition, upgrading infrastructure and expand coverage across Jordan, in support of the National ICT Strategy. Moreover, Umniah also launched its ultra-fast 3.75G network, powered by state-of-the-art HSPA+ technology. This service and any internet related services were under evo brand, providing the latest innovations in mobile broadband Internet to Jordan. One of Umniah's prominent achievements was introducing Umax, its own brand for WiMAX (Worldwide Interoperability for Microwave Access). This state-of-the-art technology provides Internet users with high quality access to the Internet with no need for a landline. In this short life time of

Umniah, it has proved its determination of being one of the entrepreneurs in competition by offering new services and technologies affordable to customers. Last but not east, in 2012, Umniah has reached 2.4 million mobile customers and with market share reached 31% (www.umniah.com).

2.3 Review of Related Literature

Strategic Orientations

Strategic orientations are considered the guiding principles that influence the business environment and the strategic activities (Noble, et al. 2002). They direct the firm how to create the proper behavior to achieve the superior performance. Liu, et al. (2011) defined strategic orientations as the basic values of the firm which guide the strategy making. Thus, being strategic oriented firm provides it with the ability to survive and compete in global markets. The strategic orientations that influence the firm performance are classified into four components and they are: Customer orientations, competitor orientation, cost orientation and innovation orientation. While customer orientation refers to the collection of intelligence about customers to satisfy their needs and wants, Competitor orientation refers to a firm's ability to identify, analyze, and respond to competitors' actions (Cheng & Krumwiede, 2012). Moreover, innovation orientation is a strategic behavior that seeks to the creativity and new ideas in developing services or products (Olson et al., 2005). In addition, cost orientation reflects firm's ability to achieve efficiency in all parts of the value chain (Olson et al., 2005). Researcher conducted these four components as representative to strategic orientations and as the most significant orientations for achieving superior performance based on the majority of prior studies that have been read (Wanga & Ahmed, 2008; Zhou and Li, 2010; Avci, et al.,2010; Theodosiou, et al.,2012).

The integration among those orientations provides firm with proactive strategic behaviors that increase productivity, profitability, market share, and seek towards the customer satisfaction (Avci, et al., 2010). Moreover, the complexity of integration between these orientations demanded smart applications that help in steering these orientations. E-business applications are capable of managing the complexity accrued in the turbulent business environment efficiently and in timely manner. However the firm should assimilate and expand the usage of these applications to maximize desired results.

E-Business Assimilation

Assimilation is defined as the extent of using of technology across organizational work processes and becoming correlated in the activities of those processes (Purvis et al. 2001). Assimilating E-business technologies can be greatly improved if the firm has a high absorptive capacity which facilitate assimilating the external information and accept these technologies to enhance the business flow and the performance (Hossain, et al., 2010). According to that; organizations capability will be improved to sense and respond to business environment changes on effective and efficient manner. However, e-business applications are available for almost all organizations in cost-effective way, but the question is how individuals accept and depend on these smart systems to perform business. Prior researches showed that 80% of newly developed systems failure attributed to human factors rather technology factor (Laudon and Laudon, 2011). Based on that; when ever the organizations become more mature about the benefits that technologies can provide such increasing the productivity, enhancing performance and market forecasting, that will increase ratio of adoption and acceptance for these applications (Wanga & Ahmed,2008). In addition, Strategic and organizational imperatives influence the assimilation process. If these applications emphasis the business strategy and enhance achieving it, so that will increase the acceptance ratio for these applications. Moreover, Top management support breaks the ice of using these technologies, and that plays a major role in the assimilation (Hossain, et al., 2010).

Organizational Agility

The intensive competition nowadays obligates the modern companies to respond quickly in accordance with the customers' dynamic demands (Goh, 2006). Therefore; Agility behavior that is defined as emerging as an important dynamic capability in contemporary business environments; became an attractive strategy (D'Aveni et al., 2010). Agile enterprises are concerned with change, uncertainty and unpredictability within their business environment and with making an appropriate response. This behavior provides firms with dynamic capability to integrate, build, and to reconfigure internal and external competencies to sense and respond quickly to changes in customer preferences and market needs in order to create competitive advantage (Kirca, et al., 2005).

In turbulent business environment, the organization needs to be smarter in dealing with threats or opportunities as soon as possible. E-business applications offer the ability to extract the external and internal events, analyze them and support the decision makers to move faster toward a smart decision.

2.4 Review of Previous Studies

Zhang and Sharifi (2000) conducted a study titled **"A methodology for achieving agility in manufacturing organizations"**. They pointed the light on the adaptability to changes in the business environment and on addressing market and customer needs proactively. Besides that; Understanding and responding to changes, and taking advantage of changes through managerial and manufacturing methods to produce the concept of agile manufacturing. That paper presented quantitative methodology by using questionnaires and surveys, the respondent sample included 1000 companies and 12 case-studies conducted in UK. They reached through this study into a methodology for implementing agile manufacturing in industry, and how this methodology will help in drawing the firm's strategies. In addition, how computer-based implementation facilitated deploying this methodology.

Stone and Good, (2001) conducted a study titled **"The assimilation of computer-aided marketing activities".** This study aimed to put a focal concentration on the computerization phenomenon and its influence on marketing activities. Additionally, it aimed to explore the factors that affect the assimilation of computer-based applications. Researchers followed the quantitative methodology, and the survey data were collected from 195 marketing executives. The results revealed that computerization enhances both tactical and strategic activities. Also computerization ensures the accuracy of tactical activities which lead to accurate long-term strategies, also that would enhance productivity and increasing profitability.

Langerak (2003) conducted a study titled **"An Appraisal of Research on the Predictive Power of Market Orientation".** He addressed the relationship between market orientation and business performance. That paper presented quantitative methodology by using surveys and prior studies, the respondent sample included 222 strategic business units and conducted in Rotterdam. Based on his in-depth research, he

reached that market orientation plays a major role in unifying individuals and departmental efforts in the delivering customers' needs and seeking to achieve competitive advantage. Therefore, a market-oriented firm is more capable to achieve high levels of customer satisfaction and loyalty, attract new customers, increase market share and enhance the organizational performance.

Rai, et al. (2006) conducted a study titled "**Assimilation patterns in the use of electronic procurement innovations: A cluster analysis".** This study aimed to figure the role of Electronic procurement innovation (EPI) assimilation on enhancing the procurement productivity. This study conducted a quantitative methodology by using surveys. The sample included 1200 senior procurement professionals drawn from the membership database of the Institute of Supply Management (ISM). The sample presented 166 different firms in the US. After deep research, the results showed that accepting the EPI increased the procurement productivity, enhanced its effectiveness, and efficiency. In addition, results shed the spot light on the responsible factors for facilitating the EPI assimilation which were the top management support, IT sophistication, and EPI infrastructure capability.

Tarafdar and Vaidya (2006) conducted a study titled **Information systems assimilation in Indian organizations: An examination of strategic and organizational imperatives.** They put a focal concentration on the organizational and strategic imperatives that have influenced Information System (IS) assimilation and evolution of the IS application portfolio in Indian firms. They used the qualitative methodology and they collected data through structured, open-ended interviews. Besides that, multiple case-studies facilitated collecting related data. The sample included 9 companies in India. Based on that, their results suggested encouraging the line managers and end users to adopt IT which help to achieve innovation. They indicated that In Indian firms, private sector firms were the earliest to be computerized by the government after they have realized the greater competition, requirements for better customer service and more operational efficiency which will be achieved through IT. On the other hand, the public sector was enhanced through computerization by programs which helped in managing reports, maintenance issues and data entry.

Jiménez and Cegarra-Navarro (2006) conducted study titled **"The performance effect of organizational learning and market orientation".** This study puts the spot light on the organizational learning capability which helps the company to move from a given situation to another desired situation of market orientation and performance. This study deployed the quantitative methodology depending on questionnaires and surveys as tools for collecting data from 1600 companies in Spain. Based on that, the results of this study revealed that market orientation can influence the performance significantly only when it is mediated by organizational learning. Besides that, organizational learning has a positive effect on performance. The reached results indicate that the ability of companies to create knowledge is based on the capacity to achieve sustainable competitive advantages.

Beverland and Lindgreen, (2007) conducted a study titled **"Implementing market orientation in industrial firms: A multiple case study".** This study aimed to understand the influence of implementing market orientation on industrial firms in New-Zealand. In addition, the study focused on drawing the road of implementing the market orientation culture in firms. The study applied a qualitative methodology through a multiple-case approach because of the complexity of the phenomenon. As a result, the article reached forms for implementing the three strategies which facilitate deploying market orientation. These three strategies were revolved about: 1) leaders' support for change; 2) inter-functional coordination; 3) the use of market intelligence.

Lau, et al., (2008) conducted a study titled **"Strategic orientation of high-technology firms in a transitional economy"**. This study aimed to examine how the top management cognition and the organizational resources facilitate implementing strategic orientation in the transitional economy. This aim was examined through a quantitative methodology, using surveys on 698 firms in China. Therefore, the results revealed that top management cognition and the organizational resources have a significant influence on developing the firm's strategic orientation.

Wanga and Ahmed (2008) conducted study titled **"The moderating effect of the business strategic orientation on e-Commerce adoption: Evidence from UK family run SMEs"**. The study showed how the environmental and organizational determinants facilitate the e-Commerce adoption in the family business context. Also they aimed to explore the mediating effect of business strategic orientation on the relationships between adoption determinants and adoption decision. They depended on a quantitative methodology through questionnaire tool that targeted 942 family businesses in UK. Results of this study showed that external pressure and perceived benefits are two drivers of e-Commerce adoption. External pressure was addressed as the external business environments like globalization or competitors' situation, which has a positive effect on e-commerce adoption. Additionally to that; perceived benefits such improving business efficiency and increasing business growth are achieved through enhancing relationships with business stakeholders, expanding customer base, and enhancing market position.

Zhou and Li (2010) conducted a study titled **"How strategic orientations influence the building of dynamic capability in emerging economies**". They examined how strategic orientation helped in building dynamic capability China's emerging economy. In that study, they depended on quantitative methodology, and collecting data was through interviews and questionnaires that targeted 420 firms in China. Most important results of their study were that when ever market demand becomes increasingly uncertain, the customer orientation will have a weaker impact, and in contrary technology orientation has a stronger effect on adaptive capability. So that leads us that competitor and technology orientations build adaptive capability more effectively. They revealed also that the integration of strategic orientation and adaptive capability perspectives enhance the firm's capability to the external interactions with customers, competitors, and technology affects its internal resource reconfiguration.

Avci, et al. (2010) conducted study titled "**Strategic orientation and performance of tourism firms: Evidence from a developing country**". They put a focal concentration on differences between financial and nonfinancial performance based on the strategic orientations tourism enterprises. They also investigated the relationship between strategic orientation and firm performance, by depending on different business segments. Moreover, they deployed quantitative methodology through using surveys that targeted 254 hotels, 183 restaurants in Mugla. Based on that, the results showed that there was a significant difference in financial performance among the four strategic orientations for travel agencies. Based on non-financial performance, there was no difference among the four strategic orientations for travel agencies.

Hossain, et al. (2010) conducted study titled **"Impacts of organizational assimilation of e-government systems on business value creation: A structuration theory approach".** Their study aimed to focus on assimilating e-government systems by organizations is important for business value creation. The goal of this paper is to present the factors that affect the assimilation of e-government systems and how e-government systems have impact on the business value creation. Depending on quantitative methodology; they used questionnaires for public sector firms in Korea. Based on that, results revealed that E-government systems value was influenced significantly by e-government system assimilation as expected. Also results suggested that top management leadership, user support, security, IT sophistication, user IT competence, and e-government systems standards enhance the organizational e-government system assimilation. Besides that, how the top management play a crucial role in promoting e-government system assimilation.

Liao, et al. (2010) conducted study titled "**A survey of market orientation research"**. Main goal of this research is to provide a roadmap to gain a better understanding of MO research and how it affects the organizational performance. They study used a quantitative methodology through survey and prior studies to collect related data from 800 articles in the United States. Based on that, results reflected the importance of market orientation (MO) with learning orientation (LO) on the organization's culture, the way of performing business and how to achieve sustainable competitive advantage.

Liu, et al. (2010) conducted study titled "**Ownership, strategic orientation and internationalization in emerging markets"**. They made a focal concentration on market orientation and entrepreneurial orientation as most important strategic orientations which facilitate firms from emerging economies and entering the global marketplace. They focused on the quantitative methodology by depending on surveys to collect relevant data from 360 branch bank in Greece. Based on that, they explored how ownership structure affects these strategic orientations and their effectiveness in facilitating international business success. In addition, results showed that ownership concentration is negatively related to entrepreneurial orientation. Also different strategic orientations affect the internationalization success according to the degree of a firm's internationalization.

Jaw, et al. (2010) conducted a study titled **"The determinants of new service development: Service characteristics, market orientation, and actualizing innovation effort"**. This study aimed to understand how service characteristics, market orientation, and innovation together drive new service development (NSD) performance**.** This study followed both qualitative and quantitative methodologies through interviews and the surveys from top 500 service firms and top 100 financial firms in Taiwan to examine the research hypotheses. The results showed that market orientation has a great influence on achieving innovation. Besides that, market orientation and innovation positively influence the NSD.

Roberts and Grover (2011) conducted study titled "**Investigating firm's customer agility and firm performance: The importance of aligning sense and respond capabilities**". This study aimed to examine firm's customer agility, by proposing the two distinct capabilities of agility, sensing and responding, and the issue of alignment between these capabilities and its impact on performance. That study used quantitative methodology and developed two surveys to collect data from 1200 marketing and sales managers in the United States to measure the constructs in the research model. Results reached that the alignment between customer sensing capability and customer responding capability enhances the performance. They indicated also that firm performance is higher when customer sensing capability and customer responding capability are aligned than when they are misaligned. Based on that, firm performance is higher when sensing and responding values are both high than when they are both low.

Neirotti and Paolucci (2011) conducted study titled "**Assessing the importance of industry in the adoption and assimilation of IT: Evidence from Italian enterprises".** This study focused on studying the effect of industry types and its role in assimilating IT to generate value. The study conducted a quantitative methodology by using questionnaire to collect data from 1215 CIO's of large enterprises in Italy. Based on that, results revealed that firms using IT depended on industry type and not on IT capabilities, such as in the material services and non-hi-tech manufacturing industries, adopting IT is unpleasantly and that had impact on the business. This research provided evidence of how adopting IT played a major role in restructuring business activities and gaining profits among hi-tech and information services companies and more traditional sectors.

Tseng and Lin (2011) conducted study titled "**Enhancing enterprise agility by deploying agile drivers, capabilities and providers**". They aimed to suggest a new agility development method for dealing with the interface and alignment issues among the agility drivers, capabilities and providers using the QFD relationship matrix and fuzzy logic. This case study was in Taiwan in IT enterprise. This development project revealed that the proposed framework and procedures can enhance the agility of an enterprise as well as ensure a competitive edge.Also the results concentrated on the critical issue of aligning and integrate agility providers, capabilities and drivers to ensure that the agility providers can satisfy the agility capabilities and the agility capabilities can cope with agility drivers, transforming them into strategic competitive edges.

Lau, (2011) conducted a study titled **"Team and organizational resources, strategic orientations, and firm performance in a transitional economy".** This study aimed to explore the influence of the managerial orientations on the performance in the transitional economy. In addition, it aimed to put a focal concentration on the mediated role of strategic orientations on managerial orientations and performance in a transitional economy. The study followed a quantitative methodology to collect needed data from 600 firms through surveys applied in china. As results revealed, both team and organizational resources have positive influence on the strategic orientations of firm in a transitional economy.

Sainio, et al., (2012) conducted a study titled **"Constituents of radical innovation—exploring the role of strategic orientations and market uncertainty".** This study aimed to explore if the strategic orientations (technology and customer orientations) drive the firm into a radical innovation. In addition, explore if strategic orientations have role on turbulent markets. By applying a quantitative methodology, data were collected from 100 employees in 762 firms through surveys applied in Finland. The most prominent results showed that technology orientation enhances all the dimensions of radical innovation. On the other hand, customer orientation influences only the business model and technological dimensions. Besides that, market uncertainty negatively moderates the strategic orientations and the radical innovation.

Theodosiou, et al. (2012) conducted study titled **"Strategic orientations, marketing capabilities and firm performance: An empirical investigation in the context of frontline managers in service organizations**". This study focused on the validity of linking alternative strategic orientations with firm performance, through the mediating effect of marketing capabilities. Researchers deployed the quantitative methodology depending on mail-surveys that targeted 27 bank and their 630 branches in Greece. Moreover, the results revealed that competitor orientation and innovation orientation contribute significantly to the development of marketing capabilities. Also marketing capabilities have a positive impact on firm performance.

This study indicated that the three antecedent factors (market turbulence, intensity of competition, and decentralization in decision making) have a significant positive effect on the four strategic orientations. These results suggest that those orientations will be more successful in responding to the environment and make the firm capable in achieving competitive advantage and superior performance.

Cheng and Krumwiede (2012) conducted study titled **"The role of service innovation in the market orientation—new service performance linkage"**. Their research aimed to examine how each component of market orientation contributes to new service performance through various types of service innovation. Besides that, they deployed the quantitative methodology through examining prior studies and collecting data through questionnaires that targeted 235 respondents from different sectors in Taiwan. The results indicated that customer orientation enhance the service innovation, while

both competitor orientation and inter-functional coordination are significantly associated with radical service innovation.

Oliveiraa, et al. (2012) conducted study titled **"Information and Service-Oriented Architecture & Web Services: enabling integration and organizational agility".** The scope of this article focused on developing organizational modeling technologies, to present online and real time business architecture framework through technologies which enhance the way in which organizations compete, speeds up decision-making, and take leverage of market opportunities. This article delivered a new information architecture which is proper for globalized markets' changes. This developed information architecture should be capable to overcome the limitations of systems maintenance, overcome the technological barriers towards the modeling of their own business processes. This architecture also solved the problem of applications integration with the aim at creating online information for communication, data and information exchange.

Klein, (2012) conducted a study titled **"Assimilation of Internet-based purchasing applications within medical practices"**. This study aimed to reflect the importance of assimilating internet based purchasing applications in the medical field. This study also aimed to shape the relationship between the assimilation and the operational efficiency. The researcher followed a quantitative methodology by using surveys. The sample was presented by 1285 organizations in medical field located in southeastern U.S. Results showed that Internet-based applications have a positive influence on the managerial claims, operational efficiency and performance. Besides that, results reflected the important role of the IT infrastructure on effective internet-based applications.

Reid **and** Brady, (2012) conducted a study titled **"Improving firm performance through NPD: The role of market orientation, NPD orientation and the NPD process"**. This study focused on explaining the role of market orientation and NPD orientation on achieving the NPD progress successfully. This study followed a quantitative methodology through questionnaires targeted the food manufacturing. The total number of questionnaires was 898 ones, but the usable questionnaires reached 232 ones. After deep research, the prominent results ensured that market orientation and NPD orientation have significant impact on NPD program success.

Idar, et al. (2012) conducted a study titled **"The Effect of Market Orientation as Mediator to Strategic Planning Practices and Performance Relationship: Evidence from Malaysian SMEs".** This study aimed to examine the direct relationship between market orientation and strategic planning. In addition, the study aimed to examine the relation ship between the strategic planning and SME's performance, mediated by market orientation. It followed a quantitative analysis through questionnaires that targeted owners and managers of Malaysian SME's. Results revealed a significant impact of market orientation and strategic planning on the performance. In addition, it revealed that market orientation has a mediating role on the relation between strategic planning and performance; in a positive way.

Johnson, et al. (2012) conducted a study titled **"The role of a firm's strategic orientation dimensions in determining market orientation"**. This study aimed to put the focal concentration on the strategic orientation's dimensions and if they have effect on market orientation, moderated by the environmental forces. While authors identified the strategic orientation dimensions as the firm's aggressiveness, its future orientation, the extent of marketing formalization, and risk proclivity; the environmental forces were revolved about competitive intensity and technology turbulence. Researchers followed a quantitative methodology and the data were collected through surveys from 800 firms in Midwestern US. Based on the deep research, results revealed that strategic orientation's dimensions have significant influence on adopting market orientation philosophy.

Pei-Ying, et al. (2012) conducted study titled **"The role of IT in achieving operational agility: A case study of Haier, China".** They highlighted the significant role played by IT leveraging competence in achieving operational agility. It showed that IT leveraging competence helped enhancing firm’s ability to process information in a turbulent business environment. This case study was conducted in Haier Chinese Company. The results emphasized the essential role played by IT leveraging competence in achieving operational agility. Basically, they revealed that the ability to process information in an efficient and effective manner became particularly significant for the reason that it allowed organizations to reduce uncertainty and make more accurate decisions.

Liu, et al. (2013) conducted a study titled **"The impact of IT capabilities on firm performance: The mediating roles of absorptive capacity and supply chain agility".** This article contributed in building a model that examined how IT capabilities affect firm performance through absorptive capacity and supply chain agility in the supply chain context. This study conducted a quantitative methodology by using surveys as tool for collecting data from 1000 industrial firm in China. The results lead to the mediate role of absorptive capacity and supply chain agility when IT capabilities influence on firm performance. In addition; the article showed that there should be integration between IT capabilities, absorptive capacity, and supply chain agility to improve firm performance. The results strongly support the claim that a firm's IT capabilities (flexible IT infrastructure and IT assimilation) can help the firm improve its absorptive capacity.

We can summarize the above literature in table.2

Study By	Variables	Methodology	Results	How is it related?
Zhang & Sharifi (2000)		- Quantitative Methodology -Tools: questionnaire, survey -Sample: 1000 companies (survey) 12 companies (case studies) - Country: UK	-Reaching a methodology for implementing agile manufacturing in industry. - Computer-based implementation facilitated deploying this methodology.	1- Understanding the agile behavior 2- Technology helps in achieving agility and this support the theory.
Langerak (2003)	-Market Orientation -Business performance	- Quantitative Methodology -Tools: Prior Studies, Survey -Sample: 222 strategic business units -Country: Rotterdam	Market orientation contributes in achieving customer satisfaction, customer loyalty and competitive advantages.	-Since market orientation is part of strategic orientations, this study indicated how market orientation helps in achieving competitive advantage and enhancing performance. This supports our theory. - Researcher referred to this study when constructing study model.

Study By	Variables	Methodology	Results	How is it related?
Tarafdar &Vaidya (2006)		- Qualitative Methodology -Tools: Multiple case-study method -Structured open-ended interviews -Sample: 9 companies -Country: India	-Results encourage managers to adopt IT. -Private firms became early adopter to IT more than public firms.	1- This study revealed some factors affect IT assimilation. 2- These factors helped us to understand how we can maximize e-business effectiveness within the sampled firms.
Jiménez& Cegarra-Navarro (2006)	-Market orientations -Organizational learning -Performance	-Quantitative Methodology -Tools: Interviews, structured questionnaire. -Sample: 1600 companies -Country: Spain	-Market orientation influences the performance significantly only when it is mediated by organizational learning. -Organizational learning has a positive effect on performance.	-Understanding how organizational learning (Human Resource Factor & Knowledge Management) helps in steering market orientations towards better performance. - This study also contributed in building the study model.

Study By	Variables	Methodology	Results	How is it related?
Wanga & Ahmed (2008)	-External pressure -Organizational readiness -Perceived benefits -Customer Orientation -Competitor Orientation -Cost Orientation -Innovation Orientation -E-commerce Adoption	-Quantitative Approach -Tools: Questionnaire -Sample: 942 family businesses, 88 useful responses. -Country: UK	- External pressure and perceived benefits are two drivers of e-Commerce adoption.	-Knowing some factors that affect assimilating new e-business technologies. This helped in building literature and comparing between UK and Jordanian sampled firms whether these factors helped in assimilating e-business or there are other factors. -This study contributed in building the study model. -Researcher referred to this study to determine the strategic orientation components.
Zhou and Li (2010)	Customer Orientation -Competitor Orientation -Cost Orientation -Innovation Orientation -Adaptive capability	-Quantitative methodology -Tools: Interviews, Questionnaire. -Sample: 420 firms -Country: China	-Competitor and technology orientations build adaptive capability more effectively than customer orientation in the uncertain markets. -The integration of strategic orientations and adaptive capability perspectives enhance the firm's capability in dealing with the changes.	This study supports our theory that strategic orientations enhance performance in turbulent environment. -Researcher referred to this study when constructing study model. -Researcher referred to this study to determine the strategic orientation components.

Study By	Variables	Methodology	Results	How is it related?
Avci, et al. (2010)	-Customer Orientation. -Competitor Orientation. -Cost Orientation. -Innovation Orientation. -financial performance -non-financial performance	-Quantitative Method. -Tools: questionnaire, surveys. -Sample: 254 hotels, 183 restaurants. -Country: Mugla	- That there was a significant difference in financial performance among the four strategic orientations for travel agencies. -There was no difference in non-financial performance among the four strategic orientations for travel agencies.	-This study contributed in building the study model. -Researcher referred to this study to determine the strategic orientation components.
Hossain, et al. (2010)		-Quantitative methodology. -Tools: Survey -Sample: public sector -Country: Korea	- E-government systems value was influenced significantly by e-government system assimilation as expected. - The top management plays a crucial role in promoting e-government system assimilation.	This study sample supports our sample (Top & Middle level) and how this level has an important role to encourage assimilating new technologies and e-business applications.
Liao, et al (2010)	-Market orientation -Learning Orientation -Performance	-Quantitative Methodology -Tools: Survey, prior studies -Sample: 800 articles -Country: US	-Market orientation (MO) and learning orientation (LO) affect business performance and competitive advantage.	-This study helped in building the study model.

Study By	Variables	Methodology	Results	How is it related?
Liu, et al. (2010)	-Ownership concentration -CEO ownership -Entrepreneurial Orientation -Market Orientation. Internationalization	-Quantitative Methodology -Tools: mail surveys, structured questionnaires. -Sample: 360 branch bank Country: Greece	-Different strategic orientations affect the internationalization success according to the degree of a firm's internationalization.	-Besides on contributing when writing literature, this study was a reference when building the study model.
Roberts &Grover (2011)		- Quantitative Methodology. -Tools: Survey -Sample: 1200 sales/marketing Managers. -Country: US	- The alignment between customer sensing capability and customer responding capability enhances the performance.	This study helped in building study model when presenting the dependent variable (organizational agility).
Neirotti& Paolucci (2011)	-IT Assimilation -IT adoption extent IT expenditure -Performance -Industry type	-Quantitative Methodology -Tools: Mailed surveys -Sample: 1215 CIO's of large enterprises -Country: Italy	- IT depended on industry type and not on IT capabilities	- This study helped in choosing study population, since the industry type plays a role in assimilating e-business. -This study contributed in presenting the mediating variable in study model (e-business assimilation).

Study By	Variables	Methodology	Results	How is it related?
Tseng & Lin (2011)		- Case study -Tools: Survey -Sample: IT Enterprise -Country: Taiwan	-Aligning and integrating agility providers, capabilities and drivers to ensure achieving competitive advantages.	- This study discussed one of our study variables (Agility) and presenting how agility drives better performance.
Theodosiou, et al. (2012)	-Market turbulence -intensity of competition -Decentralization -Customer Orientation. -Competitor Orientation. -Cost Orientation. -Innovation Orientation. -Marketing Capability -Branch performance	-Quantitative Methodology -Tools: Mailed surveys, structured questionnaires -Sample: 27 bank and their 630 branches. -Country: Greece	Strategic orientations have significant influence on the firm performance and the way of achieving competitive advantage.	This study contributed in building study model when determining the strategic orientation components. This study showed how strategic orientations serve the market turbulence and that supports out theory.

Study By	Variables	Methodology	Results	How is it related?
Cheng &Krumwiede (2012)	-Customer Orientation. -Competitor Orientation -Inter-functional Coordination -incremental Service Innovation -Radical service innovation -Market performance -Financial performance	- Quantitative Methodology -Tools: Prior studies, structured questionnaires. -Sample: 235 respondents from different sectors. -Country: Taiwan	- Customer orientation enhances the service innovation, while competitor orientation and inter-functional coordination are significantly associated with radical service innovation.	- This study served in building the study model. - This study also contributed when constructing the questionnaire; with statements describe some variables (customer orientation and competitor orientation).
Oliveiraa, et al. (2012)		Conceptual framework (no tested hypothesis, no sample)	-Delivering a new information architecture which is proper for globalized markets' changes. -Solved the problem of applications integration with the aim at creating online information for communication, data and information exchange.	The researcher referred to this study when presenting the dependent variable (organizational agility) in study model.

Study By	Variables	Methodology	Results	How is it related?
Pei-Ying, et al. (2012)	-IT Capabilities -Operational agility	-Case-Study -Sample: Haier Company -Country: China	- The essential role played by IT leveraging competence in achieving operational agility.	-This study supported our theory when mentioning IT role in achieving agility. -Researcher also referred to this study when building study model.
Liu, et al. (2013)	-IT capabilities -firm performance -Absorptive capacity -Supply chain agility	-Quantitative Methodology -Tools: survey -Sample: 1000 industrial firm -Country: China	- The mediate role of absorptive capacity and supply chain agility when IT capabilities influence on firm performance. - Firm's IT capabilities (flexible IT infrastructure and IT assimilation) can help the firm improve its absorptive capacity.	-This study supported our theory when indicating how IT assimilation delivers agility. -This study contributed in building the study model, when presenting the dependent variable (organizational agility).

Table.2

2.5 Significant Features of the Study:

1. To the best knowledge of the researcher, this is the first study that tried to explore the impact of strategic orientations on e-business assimilation and organization agility.
2. This study provided a direct impact between the e-business assimilation and the organization agility, while the prior studies provided evidence about IT influence on achieving organizational agility.
3. According to the in-depth research, there wasn't any prior study examined the relation between the current research variables.
4. While most previous studies focused on e-business assimilation were conducted in developed countries, the current study reflected the experience of a developing country (Jordan).

2.6 Study Model

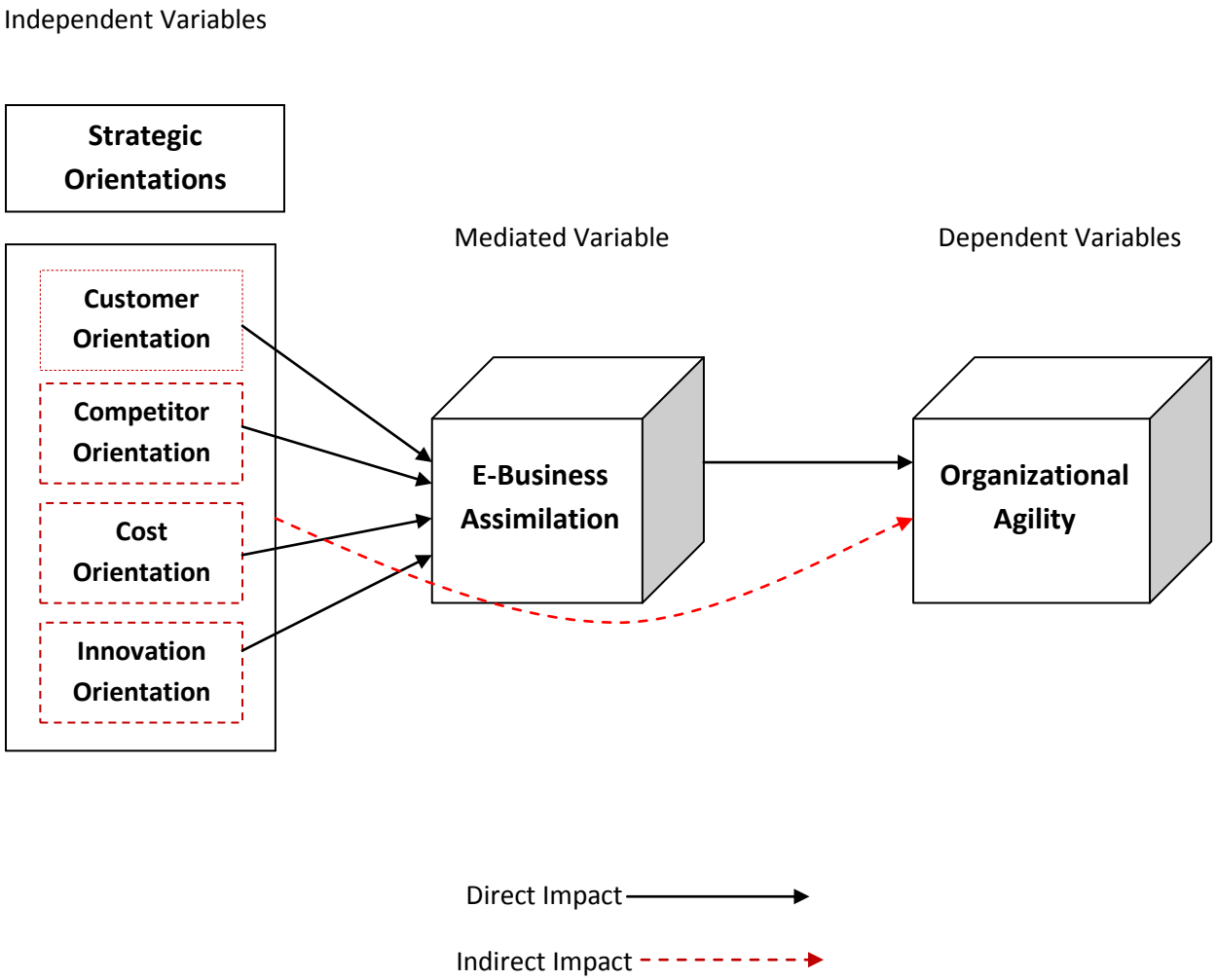

Fig.1 Study Model

The study model developed based on the following studies: strategic orientations: Langerak, 2003; Jiménez and Cegarra-Navarro, 2006; Wanga and Ahmed, 2008; Zhou and Li, 2010; Avci, et al., 2010; Liao, et al., 2010; Liu, et al., 2010; Theodosiou, et al., 2012, Cheng and Krumwiede, 2012; Liu, et al., 2012; **E-business assimilation:** Tarafdar and Vaidya, 2006; Wanga and Ahmed, 2008; Hossain, et al., 2010; Neirotti and Paolucci, 2011; **Organizational agility:** Zhang and Sharifi, 2000; Zhou and Li, 2010; Roberts and Grover, 2011; Hong and Ching-Torng, 2011; Liu, et al., 2013; Oliveiraa, et al., 2012; Pei-Ying, et al., 2012.

Chapter 3

Methods and Procedures

3.1 • Study Method Approach

3.2 • Study Population

3.3 • Study Unit of Analysis

3.4 • Study Collection Tools

3.5 • Study Variables

3.6 • Study Validity

3.7 • Study Reliability

3.8 • Study Statistical Techniques

Introduction:

This chapter presents the study sample, methods of collecting data, the sources of data and methods of data analysis.

3.1 Study Method Approach

This study deployed the quantitative methodology through investigating the related prior studies, and by using questionnaires presented to the unit of analysis. The questionnaire validity was examined by panel of judgment includes 7 academics. The questionnaire was constructed by four sections which are demographic section, strategic orientations section, e-business assimilation section and the last section is for the organizational agility.

3.2 Study Population

The study population consisted of all managers working at the Jordanian Communication Companies, including: Zain Communication Company, Umniah Communication Company and Orange Communication Company. This population negated any need for sampling.

3.3 Study Unit of Analysis

The research unit of analysis consisted of all managers working at middle and top management levels because it is believed that they have good knowledge about the phenomena under investigation. The questionnaire was distributed to 150 managers in Jordanian Communication Companies and this size was determined according to companies' permission. Only 117 responded to the questionnaire. Out of the returned questionnaires, 7 responses were excluded due to missing values and multiple answers to questions. Accordingly, only 110 responses were valid for data analysis.

3.4 Study data collection tools

First: Secondary Data

Secondary data was collected from articles, books, theses, etc. This way facilitated building strong theoretical background to clarify the problem definition, testing, and comparing study results with literature results.

Second: Primary Data

The primary data was collected through questionnaires which were divided into four sections representing demographics and study variables. The first section is meant to collect demographic data of research respondents. The second section presented the strategic orientations, the third section presented the e-business assimilation, and the last section conducted the organizational agility. The questionnaire items were anchored according to the Five Point Likert Scale (1 strongly disagree, 2 disagree, 3 neutral, 4 agree, 5 strongly agree).

The questionnaire instrumental sections are as follows:

Section One: **Demographic variables.** The demographic information was collected with closed-ended questions, through **(5)** factors (Gender, Age, Education, Years in Current position, and Years of experience with the current organization).

Section Two: **Independent Variable**: This section measured the Strategic Orientation components through **(4)** dimensions (Competitor Orientation was measured through **(4)** statements, Customer Orientation was measured through **(5)** statements, Cost Orientation was measured through **(4)** statements and Innovation Orientation was measured through **(3)** statements on a 5 point Likert-type scale.

Section Three: **(Mediating Variable) E-Business Assimilation.** This Section was measured through **(8)** statements, statements on a 5 point Likert-type scale.

Section Four: **(Dependent Variable) Organizational Agility.** This Section was measured through **(8)** statements, statements on a 5 point Likert-type scale.

Description of Demographic Variables

After collecting data from our unit of analysis, **Table (3)** shows the nature of respondents and demographic variables of the study sample (Gender, Age, Education, Years in current position, and Years of Experience with the current organization).

Table (3) Descriptive sample of the demographic variables of the study

No	*Variables*	*Categorization*	*Frequency*	*Percent*
1	***Gender***	Male	85	77.3
		Female	25	22.7
Total			***110***	***100%***
2	***Age***	20-25 Years old	***	***
		26-30 Years old	11	10.0
		31-35 Years old	11	10.0
		36-40 Years old	46	41.8
		More than 40 years old	42	38.2
Total			***110***	***100%***
3	***Educational Level***	Collage	***	***
		Bachelor	71	64.5
		Master	35	31.8
		PhD	4	3.6
Total			***110***	***100%***
4	***Years in current position***	Less than 5 Years	13	11.8
		5-10 Years	40	36.4
		11-15 Years	27	24.5
		More than 15 Years	30	27.3
Total			***110***	***100%***
5	***Years of experience in the current organization***	Less than 5 Years	21	19.1
		5-10 Years	49	44.5
		11-15 Years	20	18.2
		More than 15 Years	20	18.2
Total			***110***	***100%***

Table (3) shows the demographic variables of the study through 4 sections about the Gender, Age, Educational Level, Years in the current position, and years of experience in the current organization. First section (Gender) reflects that the majority of respondents (77.3%) were Males, whilst only (22.7%) were Females in the sampled organizations. Second section (Age) concerned about reflecting the age categories of respondents; while the "36-40" category represented the highest percentage of employees (41.8%), the "41 and above" category ranked the second level when the respondents reached (38.2 %) from the sample size. When both "26-30" category and "31-35" category represented the same percentage (10 %) of the sample size, the "20-25" category didn't represent any of the sampled employees. Third section (Educational Level) concerned about reflecting the educational background of the sample, and it reflects that the majority (64.5 %) of respondents had bachelor degree, whilst (31.8 %) of respondents had masters degree, and when only (3.6 %) of respondents had their PhD, there were no collage degree in the sampled organizations. Forth section concerned about the years spent in current position and the majority (63.4 %) of the sample spent round 5 to 10 years in the current position, whilst (27.3 %) spent more than 15 years, and (24.5 %) spent round 11 to 15 years, only (11.8 %) spent less than 5 years in the sampled organization. Last but not least, fifth section concerned about the years of experience in the current organization and reflected that the majority (44.5 %) of the sampled organization spent round 5 to 10 years, when (19.1 %) of respondents spent only less than 5 years, and same percentage (18.2 %) represented employees spent round 11 to 15 years, and the employees who spent more than 15 years in the sampled organizations.

3.5 Study Variables

Independent variables: Strategic Orientation Components (customer orientation, competitor orientation, cost orientation and innovation orientation).

Mediating variable: E-business Assimilation.

Dependent Variable: Organizational agility.

3.6 Data Validity:

A. Content Validity

To ensure a high level of content validity, the questionnaire was built depending on prior studies. In addition, the first draft of the questionnaire was checked by at 7 academics who are experts in the research field. This way ensured clarity, conscience, and good representation for the items. After taking all the reviewers suggestions and comments, a new draft was produced and distributed to the research sample.

B. Construct Validity

We used the factor analysis in order to examine the construct validity of the questionnaire and the tables bellow show that all statements were above 50% which means the statements are valid to be used.

Table (4): Factor Analysis for Competitor Orientation Statements

No.	Statement	Factor 1
1	The firm responds rapidly to competitive actions that threaten it	**0.830**
2	Top management regularly discusses competitors' strengths and strategies	**0.899**
3	The firm targets customers regularly to enhance the competitive advantage.	**0.901**
4	Salespeople regularly share competitors' information.	**0.811**

Table (5): Factor Analysis for Customer Orientation Statements

No.	Statement	Factor 1
1	Firm's objectives are driven primarily by customer satisfaction.	**0.822**
2	Firm's strategy for competitive advantage is based on its understanding of our customers' needs.	**0.848**
3	Firm's market strategies are driven by its understanding of possibilities for creating value for its customers.	**0.799**
4	Firm measures customer satisfaction systematically and frequently.	**0.803**
5	Firm pays close attention to after-sales service.	**0.785**

Table (6): Factor Analysis for Cost Orientation Statements

No.	Statement	Factor 1
1	Firm seeks to improve the operational efficiency as a prior goal.	**0.837**
2	Firm seeks for achieving cost advantage.	**0.831**
3	Cost is the most critical component in the firm's performance measures	**0.878**
4	Cost issues always take a prior attention in any decision making process.	**0.788**

Table (7): Factor Analysis for Innovation Orientation Statements

No.	Statement	Factor 1
1	The Firm pays close attention to innovation	**0.783**
2	Firm ensures the need of innovation for development.	**0.852**
3	Firm supports the need of development and utilization of new resources.	***0.815***

Table (8): Factor Analysis for E-Business Assimilation Statements

No.	Statement	Factor 1
1	Company is conscious about the importance of the internet to perform business.	**0.740**
2	E-Business applications enable information sharing among employees and among units.	**0.762**
3	E-Business applications enable information sharing between existing and potential customers.	**0.679**
4	E-Business applications integrate all organization parts for a better customer service.	**0.735**
5	E-Business applications enable the creativity in the online marketing and advertising	**0.707**
6	E-Business application enable accomplishing transactions with customers through Internet	**0.699**
7	E-Business applications enable an integrated and accurate enterprise resources planning	**0.703**
8	E-Business applications enhance the customer relationship management	**0.725**

Table (9): Factor Analysis for Organizational Agility Statements

No.	Statement	Factor 1
1	The firm collects detailed information about customers frequently.	**0.712**
2	The firm prepares future plans and demand forecasts related to its customers.	**0.706**
3	The firm has the capability to fit time, quantity, product mix, and way of distribution to customers' expectations.	**0.771**
4	The firm collects detailed information about its suppliers and service providers frequently.	**0.655**
5	The firm is able to exploit the resources and capabilities of suppliers to enhance the quality and quantity of products and services.	**0.643**
6	The firm collects information about its main competitors frequently.	**0.773**
7	The firm pays attention to the major concerns of its competitors	**0.785**
8	A firm responds immediately to competitors' actions	**0.767**

C. Correlation of Variables

Bivariate Pearson Correlation

Bivariate Pearson Correlation test was conducted to assure the independency of data. The rule is that each and every construct should correlate with itself in a way that is much greater to its correlations with other constructs. If this rule is true, then constructs are independent and that data is ready and valid to be used with regression analyses. Based on the values in Table 10, the constructs are independent as they correlate with themselves in a way that is stronger in comparison to their correlations with other constructs.

Table (10) Correlation of variables

	CopO	CusO	CosO	InO	EB	AG
CopO	1.00					
CusO	0.571**	1.00				
CosO	0.374**	0.383**	1.00			
InO	0.646**	0.683**	0.474**	1.00		
EB	0.620**	0.747**	0.378**	0.697**	1.00	
AG	0.681**	0.733**	0.523**	0.816**	0.821**	1.00

****. Correlation is significant at the 0.05 level (2-tailed).**

CopO: Competitor Orientation, **CusO:** Customer Orientation, **CosO:** Cost Orientation, **InO:** Innovation Orientation, **EB:** E-Business Assimilation, **AG:** Organizational Agility.

Based on the results of the above test, the researcher was able to utilize regression analysis to test the research hypotheses.

3.7 Data Reliability:

In order to measure the internal consistency and reliability of the study's constructs, Cronbach's alpha (α) measure was used. The scales' reliabilities were measured and the Cronbach's alphas of all scales as in Table (11) were ranged between (75.1 and 88.2 %); indicating good reliabilities of the scales (Hair et al., 2006).

Table (11) Reliability of Questionnaire Dimensions

Variables	Cronbach's Alpha	No. of Items
Strategic Orientations	**0.799**	
Competitor Orientation	**0.882**	**4**
Customer Orientation	**0.870**	**5**
Cost Orientation	**0.844**	**4**
Innovation Orientation	**0.751**	**3**
E-Business Assimilation	**0.865**	**8**
Organizational Agility	**0.873**	**8**
All Variables	**0.892**	

3.8 Study Statistical Techniques:

The researcher used the suitable statistical methods that consist of:

- Percentage and Frequency.
- Cronbach's Alpha reliability (α) to measure strength of the correlation and coherence between questionnaire items.
- Factor Analysis: to measure the construct validity of the questionnaire items.
- Arithmetic Mean to identify the level of response of study sample individuals to the study variables.
- Standard Deviation to Measure the responses spacing degree about Arithmetic Mean.
- Simple Regression, and Multiple Regression analysis to Measure the impact of study variables on testing the direct effects.
- Path Analysis: To test the direct and indirect impact of independent variables on dependent variable through mediating variable.
- **Structural Equation Modeling Analysis**
    - Structural equation modeling (SEM) is a collection of statistical models that seeks to explain relationships among multiple variables. It enables researchers to examine interrelationships among multiple dependent and independent variables simultaneously (Hair et al., 2006). The reasons for selecting SEM for data analysis were, firstly; SEM has the ability to test causal relationships between constructs with multiple measurement items (Hair et al., 2006). Secondly, it offers powerful and rigorous statistical procedures to deal with complex models (Tabachnick and Fidell, 2001; Hair et al., 2006). The relationships between constructs are tested using the structural model (Hair et al., 2006). A one–step approach was adopted to perform SEM analysis as recommended by Anderson and Gerbing (1988). For the measurement model, was performed using the SEM software AMOS v.18.0, the structural model related to dependent and independent variables was specified in order to test the hypotheses. Results of measurement and structural model are presented as follows.

- Relative importance, assigned due to:

  $$\text{Class Interval} = \frac{\text{Maximum Class} - \text{Minimum Class}}{\text{Number of Level}}$$

  $$\text{Class Internal} = \frac{5 - 1}{3} = \frac{4}{3} = 1.33$$

- **The Low degree from 1+1.33=2.33➔ Low Level (1 - 2.33)**
- **The Medium degree from 2.34+1.33= 3.67➔ Medium Level (2.34 – 3.67)**
- **The High degree from 3.68 and above**

Chapter 4

Results and Hypotheses Testing

4.1 • Introduction

4.2 • Descriptive Analysis of Study Variables

4.3 • Hypotheses Testing

4.1 Introduction

According to research purpose and the research framework presented in a previous chapter, this chapter describes the results of the statistical analysis for the data collection according to the research questions and research hypotheses. The data analysis included the description of the Means and Standard Deviations for questionnaire results; Multiple Regression, and Simple Regression analysis were used also to answer study questions and test study hypotheses.

4.2 Descriptive Analysis of Study Variables

4.2.1 Strategic Orientation (Competitor Orientation)

The researcher used the arithmetic mean, standard deviation, item importance and importance level as shown in ***Table (12)***.

Table (12) Arithmetic Mean, Std, Item Importance and Importance Level of Competitor Orientation

No.	Statement	Mean	Std. Deviation	Rank	Level
1	The firm responds rapidly to competitive actions that threaten it.	4.39	0.61	1	High
2	Top management regularly discusses competitors' strengths and strategies.	4.35	0.61	2	High
3	The firm targets customers regularly to enhance the competitive advantage.	4.29	0.65	3	High
4	Salespeople regularly share competitors' information.	4.02	0.68	4	High
Total		4.26			High

Table (12) shows that means of (Competitor Orientation) items are ranged between (4.02 and 4.39) with an overall mean of (4.26), and standard deviation ranged between (0.61 and 0.68), which means there is a high implementation of all items of competitor orientation. The level of such an overall mean is high. Item number **(1)** got the highest mean, which is (4.39) with a standard deviation of (0.61). The statement concerning item number (1) is as follows: **(The firm responds rapidly to competitive actions that threaten it)**.

On the other hand, Item number **(4)** came last on the basis of mean values. The mean of this item was (4.04) with a standard deviation of (0.64). The statement concerning item number (4) is as follows: **(Salespeople regularly share competitors' information)**.

This explains that the perception of the Managers about the Competitor Orientation in the Jordanian Communication companies was in the High level.

4.2.2 Strategic Orientations (Customer Orientation)

The researcher used the arithmetic mean, standard deviation, item importance and importance level as shown in ***Table (13)***.

Table (13) Arithmetic Mean, Std, Item Importance and Importance Level of Customer Orientation

No.	Order Statement	Mean	Std. Deviation	Rank	Level
1	Firm's objectives are driven primarily by customer satisfaction.	4.26	0.69	1	High
3	Firm's market strategies are driven by its understanding of possibilities for creating value for its customers.	4.19	0.66	2	High
2	Firm's strategy for competitive advantage is based on its understanding of our customers' needs.	4.17	0.68	3	High
5	Firm pays close attention to after-sales service.	4.17	0.62	4	High
4	Firm measures customer satisfaction systematically and frequently.	4.13	0.67	5	High
Total		4.18			High

Table (3) shows that means of (Competitor Orientation) items are ranged between (4.13 and 4.26) with an overall mean of (4.18), and standard deviation ranged between (0.62 and 0.69), which means there is a high implementation of all items of customer orientation. The level of such an overall mean is high. Item number **(1)** got the highest mean, which is (4.26) with a standard deviation of (0.69). The statement concerning item number (1) is as follows: **(Firm's objectives are driven primarily by customer satisfaction)**.

On the other hand, Item number **(4)** came last on the basis of mean values. The mean of this item was (4.13) with a standard deviation of (0.67). The statement concerning item number (4) is as follows: **(Firm measures customer satisfaction systematically and frequently).**

This explains that the perception of the Managers about the Customer Orientation in the Jordanian Communication companies was in the High level.

4.2.3 Strategic Orientations (Cost Orientation)

The researcher used the arithmetic mean, standard deviation, item importance and importance level as shown in ***Table (14)***.

Table (14) Arithmetic Mean, Std, Item Importance and Importance Level of Cost Orientation

No.	Statement	Mean	Std. Deviation	Rank	Level
2	Firm seeks for achieving cost advantage.	3.95	0.70	1	High
1	Firm seeks to improve the operational efficiency as a prior goal.	3.87	0.62	2	High
4	Cost issues always take a prior attention in any decision making process.	3.75	0.88	3	High
3	Cost is the most critical component in the firm's performance measures	3.57	0.96	4	Medium
Total		3.79			High

Table (14) shows that means of (Cost Orientation) items are ranged between (3.95 and 3.57) with an overall mean of (3.79), and standard deviation ranged between (0.62 and 0.96), which means there is a high implementation of all items of cost orientation. The level of such an overall mean is high. Item number **(2)** got the highest mean, which is (3.95) with a standard deviation of (0.70). The statement concerning item number (2) is as follows: **(Firm seeks for achieving cost advantage)**.

On the other hand, Item number **(3)** came last on the basis of mean values. The mean of this item was (3.57) which is medium level, with a standard deviation of (0.96). The statement concerning item number (3) is as follows: **(Cost is the most critical component in the firm's performance measures)**.

This explains that the perception of the Managers about the Cost in the Jordanian Communication companies was in the High level.

4.2.4 Strategic Orientation (Innovation Orientation)

The researcher used the arithmetic mean, standard deviation, item importance and importance level as shown in ***Table (15)***.

Table (15) Arithmetic Mean, Std, Item Importance and Importance Level of Innovation Orientation

No.	Statement	Mean	Std. Deviation	Rank	Level
1	The Firm pays close attention to innovation	4.35	0.62	1	High
2	Firm ensures the need of innovation for development.	4.34	0.65	2	High
3	Firm supports the need of development and utilization of new resources.	4.26	0.63	3	High
Total		4.32			High

Table (15) shows that means of (Innovation Orientation) items are ranged between (4.26 and 4.35) with an overall mean of (4.32), and standard deviation ranged between (0.62 and 0.65), which means there is a high implementation of all items of innovation orientation. The level of such an overall mean is high. Item number **(1)** got the highest mean, which is (4.35) with a standard deviation of (0.62). The statement concerning item number (1) is as follows: **(The Firm pays close attention to innovation)**.

On the other hand, Item number **(3)** came last on the basis of mean values. The mean of this item was (4.26) with a standard deviation of (0.63). The statement concerning item number (3) is as follows: **(Firm supports the need of development and utilization of new resources)**.

This explains that the perception of the Managers about the Innovation in the Jordanian Communication companies was in the High level.

4.2.5 E-Business Assimilation

The researcher used the arithmetic mean, standard deviation, item importance and importance level as shown in ***Table (16)***.

Table (16) Arithmetic Mean, Std, Item Importance and Importance Level of E-Business Assimilation

No.	Statement	Mean	Std. Deviation	Rank	Level
1	Company is conscious about the importance of the internet to perform business.	4.33	0.67	1	High
5	E-Business applications enable the creativity in the online marketing and advertising	4.25	0.71	2	High
4	E-Business applications integrate all organization parts for a better customer service.	4.22	0.71	3	High
7	E-Business applications enable an integrated and accurate enterprise resources planning	4.15	0.60	4	High
8	E-Business applications enhance the customer relationship management	4.15	0.56	5	High
6	E-Business application enable accomplishing transactions with customers through Internet	4.12	0.66	6	High
2	E-Business applications enable information sharing among employees and among units.	4.10	0.63	7	High
3	E-Business applications enable information sharing between existing and potential customers.	3.93	0.67	8	High
Total		4.16			High

Table (16) shows that means of (E-Business Assimilation) items are ranged between (3.93 and 4.33) with an overall mean of (4.16), and standard deviation ranged between (0.56 and 0.71), which means there is a high implementation of all items of E-business assimilation. The level of such an overall mean is high. Item number **(1)** got the highest mean, which is (4.33) with a standard deviation of (0.67). The statement concerning item number (1) is as follows: **(Company is conscious about the importance of the internet to perform business)**.

On the other hand, Item number **(3)** came last on the basis of mean values. The mean of this item was (3.93) with a standard deviation of (0.67). The statement concerning item number (3) is as follows: **(E-Business applications enable information sharing between existing and potential customers).**

This explains that the perception of the Managers about the E-Business Assimilation in the Jordanian Communication companies was in the High level.

4.2.6 Organizational Agility

The researcher used the arithmetic mean, standard deviation, item importance and importance level as shown in ***Table (17)***.

Table (17) Arithmetic Mean, Std, Item Importance and Importance Level of Organizational Agility

No.	Statement	Mean	Std. Deviation	Rank	Level
8	A firm responds immediately to competitors' actions	4.28	0.71	1	High
7	The firm pays attention to the major concerns of its competitors	4.25	0.67	2	High
1	The firm collects detailed information about customers frequently.	4.23	0.70	3	High
2	The firm prepares future plans and demand forecasts related to its customers.	4.23	0.63	4	High
6	The firm collects information about its main competitors frequently.	4.17	0.71	5	High
5	The firm is able to exploit the resources and capabilities of suppliers to enhance the quality and quantity of products and services.	4.11	0.67	6	High
3	The firm has the capability to fit time, quantity, product mix, and way of distribution to customers' expectations.	4.06	0.69	7	High
4	The firm collects detailed information about its suppliers and service providers frequently.	4.03	0.67	8	High
Total		4.17			High

Table (17) shows that means of (Organizational Agility) items are ranged between (4.03 and 4.28) with an overall mean of (4.17), and the standard deviation ranged between (0.63 and 0.71), which means there is a high implementation of all items of E-business

assimilation. The level of such an overall mean is high. Item number **(8)** got the highest mean, which is (4.28) with a standard deviation of (0.71). The statement concerning item number (8) is as follows: **(A firm responds immediately to competitors' actions)**.

On the other hand, Item number **(4)** came last on the basis of mean values. The mean of this item was (4.03) with a standard deviation of (0.67). The statement concerning item number (4) is as follows: **(The firm collects detailed information about its suppliers and service providers frequently).**

This explains that the perception of the Managers about the Organizational Agility in the Jordanian Communication companies was in the High level.

4.3 Hypotheses Testing

The first main hypothesis (H01): There is no impact of the strategic orientations on E-business assimilation at the Jordanian Communications Companies, at $\alpha \leq 0.05$.

This hypothesis was tested by the using the multiple regression analysis to test the impact of strategic orientations on e-business assimilation at the Jordanian telecommunications companies as shown in ***Table (18)***.

Table (18) **Multiple Regression Test to identify the overall impact of the Strategic Orientations (Competitor Orientation, Customer Orientation, Cost Orientation and Innovation) on E-Business assimilation**

	r	R^2	Adjusted R^2	Std. Error
Strategic Orientations	**0.802**	**0.643**	**0.629**	**0.2854**

Table (18) indicates that the strategic orientations as all, affect e-business assimilation by (64.3%). While table (19) shows how each component of strategic orientations affect the e-business assimilation. That helped us to test the sub hypotheses related to the effect of strategic orientations on e-business assimilation.

Table (19) **Multiple Regression Test to identify the impact of the Strategic Orientations (Competitor Orientation, Customer Orientation, Cost Orientation and Innovation) on E-Business assimilation**

	Un standardized Coefficients		Standardized Coefficients	T Calculated	Sig.
Strategic Orientations	**B**	**Std. Error**	**Beta**		
Competitor Orientation	0.160	0.067	0.187	2.371	0.020*
Customer Orientation	0.402	0.072	0.460	5.585	0.000*
Cost Orientation	0.066	0.047	0.009	0.141	0.888
Innovation Orientation	0.248	0.088	0.258	2.818	0.006*

As we can notice from table (19-1) that competitor orientation has an impact on E-business assimilation based on the T calculated value which is equal to (2.371) at a significant level (α ≤0.05), and affect e-business assimilation positively by (18.7%) based on Beta value. Thus, the first sub hypothesis **"There is no impact of the Competitor orientation on e-business assimilation, at α≤ 0.05"** is rejected.

Table (19-1) ***Multiple Regression test-Competitor Orientation***

Strategic Orientations	**B**	**Std. Error**	**Beta**	**T Calculated**	**Sig.**
Competitor Orientation	0.160	0.067	0.187	2.371	0.020*

Table (19-2) ***Multiple Regression Test-Customer Orientation***

Strategic Orientations	**B**	**Std. Error**	**Beta**	**T Calculated**	**Sig.**
Customer Orientation	0.402	0.072	0.460	5.585	0.000*

Table (19-2) shows that customer orientation, has an impact on e-business assimilation based on the T calculated value which is equal to (5.585) at a significant level (α ≤0.05), and affect e-business assimilation positively by (46 %) based on Beta value. Thus, the second sub hypothesis **"There is no impact of the customer orientation on e-business assimilation, at α≤ 0.05"** is rejected.

Table (19-3) ***Multiple Regression test-Innovation Orientation***

Strategic Orientations	B	Std. Error	Beta	T Calculated	Sig.
Innovation Orientation	0.248	0.088	0.258	2.818	0.006*

In addition, table (19-3) shows that innovation orientation, has an impact on e-business assimilation based on the T calculated value which is equal to (2.818) at a significant level (α ≤0.05), and affect e-business assimilation positively by (25.8 %) based on Beta value. Thus, the first sub hypothesis **"There is no impact of the Innovation orientation on e-business assimilation, at α≤ 0.05"** is rejected.

Table (19-3) ***Multiple Regression test-Cost Orientation***

Strategic Orientations	B	Std. Error	Beta	T Calculated	Sig.
Cost Orientation	0.066	0.047	0.009	0.141	0.888

However, table (19-3) shows that T calculated value of cost orientation is equal to (0.141) at level (α ≤0.05), and that indicates that cost orientation has no impact on e-business assimilation. Thus, the first sub hypothesis **"There is no impact of the Cost orientation on e-business assimilation, at α≤ 0.05"** is accepted.

The second main hypothesis (H02): There is no impact of strategic orientations on organizational agility, at α≤ 0.05.

This hypothesis was tested by using the simple regression analysis to test the impact of strategic orientations on organizational agility at the Jordanian Communications Companies as shown in ***Table (20)***.

Table (20) ***Simple regression analysis test results of the impact of Strategic Orientations on Organizational Agility in Telecommunication Companies***

r	R^2	F Value	Sig.
0.851	**0.723**	**282.536**	**0.000***

Table (20) shows that the F value is equal to (282.536) at a significant level (α≤ 0.05). This indicates that there is an impact between the strategic orientations and the organizational agility; thus, null hypothesis is rejected. The R^2 value indicates that strategic orientations impact the organizational agility by (72.3%).

Third main hypothesis (H03): There is no impact of e-business assimilation on organizational agility, at $\alpha \leq 0.05$.

The researcher tested impact of e-business assimilation on organizational agility in Communications Companies; the researcher used the Simple Regression analysis to test this hypothesis as follows:

Table (21) ***Simple regression analysis test results of the impact of E-Business Assimilation on Organizational Agility in Telecommunication Companies***

r	R^2	F Value	Sig.
0.821	**0.674**	**222.978**	**0.000***

Table (21) shows that the F value is equal to (222.978) at a significant level ($\alpha \leq 0.05$). This indicates that there is an impact between the E-Business assimilation and the organizational agility; thus, null hypothesis is rejected. The R^2 value indicates that E-business assimilation impacts the organizational agility by (67.4%).

Forth main hypothesis (H04): There is no mediating role of E-business assimilation in the impact of strategic orientation on organizational agility, at $\alpha \leq 0.05$.

This hypothesis was tested by using structural equation modeling for the requirement of goodness of fit indices.

Goodness of fit indices

Structural Equation Modeling (SEM) has three main types of fit measure indices: absolute fit indices, incremental fit indices, and parsimonious fit indices. Results of these fit measures obtained in this study and their recommended levels are presented in Table (22).

CFA was performed on the measurement model comprising six factors, which were Customer Orientation, Competitor Orientation, Cost Orientation, and Innovation Orientation as independent variables, and E-Business Assimilation Mediating Variable, while Organizational Agility Dependent Variable depicts the initial hypothesized measurement model. These factors were measured using number of construct (indicators).

The measurement model was evaluated by using the maximum likelihood (ML) estimation techniques provided by the AMOS 18. Table (22) provides the summary

results of the initial measurement model. The results revealed that chi square statistics (χ^2=91.0, df= 10) was not significant at p<0.05 indicating that data fit the model and should be accepted based on (Tabachnick and Fidell, 2012).

However, it was unreasonable to rely on the chi-square statistics as a sole indicator for evaluating the specification of model, as this statics is sensitive to the sample size and is very sensitive to the violations of the assumption of normality, especially the multivariate normality; therefore, it can be misleading. . Thus, other fit indices i.e. GFI, AGFI, CFI, and RMSEA were used to assess the specification of the model.

Results revealed that the value of GFI= 095, AGFI= 0.90, CFI =0.59, and RMSEA=0.08, which indicated that all the indices are accepted except the CFI which is which is minimum cutoff point, so further steps were taken like applying modified indices.

After inserting the covariance relationship between the independent variables, the fitness indices become that chi square statistics (χ^2=6.1, df= 2) was not significant at p<0.05 indicating that data fit the model and should be accepted. Also, the Results revealed that the value of GFI= 0.98, AGFI= 0.81, CFI =0.99, and RMSEA=0.00 indicated that all the indices are accepted for all the fitness indices as shown in the table (22) below.

Table (22) Goodness of fit statistics for the Initial CFA

	Chi Squared χ^2	GFI	CFI	RMSEA	Direct Effect		Indirect Effect	Sig.*
Strategic Orientations on Organizational Agility, through E-Business Assimilation	**6.10**	**0.98**	**0.99**	**0.00**	**Strategic Orientations on E-Business Assimilation**	**0.79**	**0.61**	**0.000**
					E-Business Assimilation on Organizational Agility	**0.87**		

RMSEA: Root Mean Square Error of Approximation must proximity to Zero
GFI: Goodness of Fit Index must proximity to One.
CFI: Comparative Fit Index must proximity to One.

Also, the path regression for each variable in the model was checked as it was illustrate in the model.

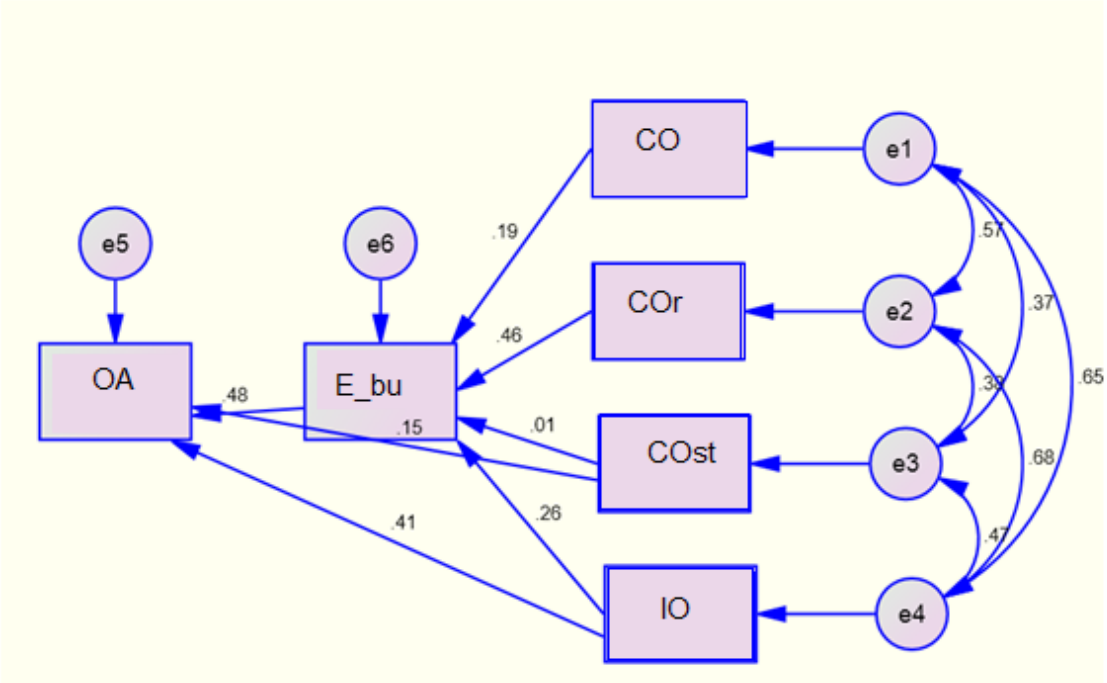

Fig.2 Path Analysis Model

Table (23) **Regression Weights: (Group number 1 - Default model)**

	Estimate	S.E.	C.R.	P	Label
E_bu <--- IO	0.248	0.086	2.871	***	
E_bu <--- COr	0.402	0.071	5.690	***	
E_bu <--- COst	0.007	0.046	0.144	0.886	
E_bu <--- CO	0.160	0.066	2.416	0.016	
OA <--- E_bu	0.505	0.063	8.069	***	
OA <--- IO	0.421	0.063	6.660	***	
OA <--- COr	0.110	0.036	3.046	***	

Table (22) shows that there is a significant impact of strategic orientations on organizational agility in the light of e-business assimilation in Jordanian Communication Companies. The χ^2 was (6.10) at level ($\alpha \leq 0.05$), whereas the GFI was (0.98) approaching to one. On the same side the CFI was (0.99) approaching to one, while the RMSEA was (0.00), as a Direct Effect was (0.79) between strategic orientations and e-business assimilation, and (0.87) between e-business assimilation and organizational agility. Moreover, there was an indirect effect between strategic orientations and organizational agility through e-business assimilation by (0.61) in Jordanian Communication Companies. Thus the forth main hypothesis will be rejected.

Based on a deeper analysis, table (23) shows that only one path coefficients is significant between competitor orientation and e-business assimilation when the value was (0.16) and the T value (C.R) equal to (2.41) at $\alpha \leq 0.05$, while the other path coefficients are statistically significant between customer orientation, and innovation orientation on the e-business assimilation when the T values were equal to (0.40, 0.24) respectively. Moreover, the path coefficient between e-business assimilation and organizational agility was statistically significant with (0.50) and t value (8.06) at $\alpha \leq 0.05$. Also the path coefficient between customer orientation and organizational agility was statistically significant with (0.11), and t value equal to (3.046) at $\alpha \leq 0.05$.

Chapter 5

Results, Conclusions, and Recommendations

5.1 • Main Results of the Study

5.2 • Conclusions

5.3 • Recommendations

5.1 Main Results of the Study

The study explored a number of important results that the researcher hopes they would lead to novel contributions to theory and relevant literature. The researcher also hopes that such results would trigger a number of critical decisions by private business organizations and more specifically companies included in the research sample. It also hoped that such decisions would be reflected positively on their business benefits. Based on the data analysis and hypotheses testing in chapter 4, the research results generated from this piece of work can be summarized as follows:

- Strategic Orientations, within the sampled organizations, are considered in high level indicating a high level of implementation.
- Competitor Orientation, within the sampled organizations, is considered in high level indicating a high level of implementation.
- Customer Orientation, within the sampled organizations, is considered in high level indicating a high level of implementation.
- Cost Orientation, within the sampled organizations, is considered in high level indicating a high level of implementation.
- Innovation Orientation, within the sampled organizations, is considered in high level indicating a high level of implementation.
- E-Business Assimilation, within the sampled organizations, is considered in high level indicating a high level of implementation.
- Organizational Agility, within the sampled organizations, is considered in high level indicating a high level of implementation.
- Competitor Orientation has a significant positive influence on E-Business assimilation at $\alpha \leq 0.05$. Communications Companies considered highly competitor oriented firms, and that illustrate the urgent need for intelligent systems to manage the intensive competition, and this supports the literature and (Gao, et al. 2007).
- Customer orientation has a positive significant influence on E-business assimilation at $\alpha \leq 0.05$. Communications Companies are market-driven firms which strive to be more knowledgeable about customers and competitors, therefore these firms are more likely to assimilate E-business in their strategies

and processes, in order to deliver their orientations. This result supports the theory and (Li, et al., 2010).

- Cost Orientation does not have a significant influence on E-Business assimilation at $\alpha \leq 0.05$. In Jordanian Communications Companies, there still an obstacle to achieve the operational efficiency through E-business systems and that negates what Wang and Ahmed reached (2008), since they believed that the perceived benefits from technology and E-business systems encourage adopting and assimilating these systems.
- Innovation Orientation has a significant influence on E-Business assimilation at $\alpha \leq 0.05$. That interpret the urgent need for smart systems to generate creativity and new ideas to steer this kind of orientation, and that supports the literature and (Lau, et al., 2008)
- Strategic Orientations have a significant influence on the organizational agility at $\alpha \leq 0.05$. Since Communications Companies are highly strategic oriented firms; that enhance their ability in predicting future through sensing and responding smoothly and in a timely manner to the business environmental changes. This results supports literature and (Theodosiou, et al. 2012).
- E-Business assimilation has significant influence on the organizational agility at $\alpha \leq 0.05$. The turbulent environment of communication sector proved the maximum need for integrated systems to manage the whole business and value chain and create a competitive advantage and smooth decision making. This supports literature and (Wang and Ahmed, 2008).
- Strategic orientations have a significant influence on the organizational agility through assimilating E-Business systems at $\alpha \leq 0.05$. Strategic oriented firms could maximize their ability in sensing and responding to the business environment through harness intelligent systems for a better and accurate performance. This also supports literature and (Pei-Ying, et al., 2012).

5.2 Conclusions

On the basis of the results of this study, the researcher concludes the following points:

- Organizations under investigation are mature enough about the great influence of E-business systems and their potentials to enhance the performance in the higher levels of the organization.
- E-business systems can generate alternatives and intelligent solutions based on analyzing the market facts, which enable managers to be agile while decision making.
- Jordanian Communication Companies considered highly strategic oriented firms since they are concerned about achieving superior performance for the long term run.
- In Jordanian Communication Companies, they should believe in how e-business systems enhance their operational efficiency and support their cost orientations.
- Jordanian Telecommunication companies approved their ability in sensing and responding to business environmental changes in a smart way and in a timely manner, in order to stay dominant in the competition market.
- Jordanian Communication Companies proved their entrepreneurship in Jordanian market, because of their excellent human and technological resources.

5.3 Recommendation

According to the results and the drawn conclusions of study, the researcher here offers some recommendations which would like to be taken seriously into consideration so as to enhance the perceived benefits of utilizing e-business systems across the whole organization levels of communication domain specifically, and any other organization wants to enhance its performance. The researcher presents through the following points the most important recommendations based on the results and conclusions of this study.

- Deep understanding of how E-business systems support the operational efficiency strategy, may lead for a better financial performance.
- Conducting studies which seek to understand the impact of cost orientation on e-business assimilation and the factors which may steer this impact in the sampled organizations.

- Conducting new studies with different strategic orientation components (i.e. supplier orientation, technology orientation, etc.) and examine their impact on the study variables.
- This study depended mainly on questionnaire to collect relevant data, and it's not free of bias. Thus, future work will recommend other approaches like interviews or focus group for a better understanding of the study phenomenon.
- Since this study was conducted only in Jordanian Communication Companies, generalizing the results will be limited to the sample, thus researcher recommends applying the study model in other sectors.
- The researcher recommends for a better cooperation between organizations and universities to enhance the research and development.

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Appendix 1: The Questionnaire

Dear Participant;

We are currently undertaking a research project aiming to explore the relationship between Strategic orientations and organizational agility; and mediating role of E-business Assimilation: An Empirical study in Jordanian Communication Sector.

Your participation means a lot to us, the success of this study dependence on your accurate response, your authenticity will add value to our study and your response will be taken for academic purpose only. We assure you that your answers will be highly secret and will not be afforded to a third party without written consent.

Please answer the questions below. However, if you are unsure about response, or think it would be misleading, please leave the specific question unanswered.

Thank you in advance for your kind cooperation.

Nadine Al-Barghouthi

First Section: General Background

Gender:

- □ Male
- □ Female

Age:

- □ 20-25 years old □ 26-30 years old
- □ 31-35 years old □ 36-40 years old
- □ More than 40 years old

Education:

□ Collage □ Bachelor □ Master □ PhD

Years in current position:

- □ Less than 5 years. □ 5-10 years.
- □ 11-15 years. □ More than 15 years.

Years of experience with the current organization:

- □ Less than 5 years. □ 5-10 years.
- □ 11-15 years. □ More than 15 years.

Second Section: Study Variables

This section will be concerned about investigating study variables. Based on your experience and knowledge; please insert √ in the appropriate column. The options range from 1 (strongly disagree), 2(disagree), 3(neutral), 4 (agree), and 5 (strongly agree).

1. Strategic Orientations 1.1 Competitor Orientation	Strongly Disagree				Strongly Agree
	1	2	3	4	5
Q1. The firm responds rapidly to competitive actions that threaten it.					
Q2. Top management regularly discusses competitors' strengths and strategies.					
Q3. The firm targets customers regularly to enhance the competitive advantage.					
Q4. Salespeople regularly share competitors' information.					
1.2 Customer Orientation					
Q5. Firm's objectives are driven primarily by customer satisfaction.					
Q6. Firm's strategy for competitive advantage is based on its understanding of our customers' needs.					
Q7. Firm's market strategies are driven by its understanding of possibilities for creating value for its customers.					
Q8. Firm measures customer satisfaction systematically and frequently.					
Q9. Firm pays close attention to after-sales service.					

1.3 Cost Orientation	Strongly Disagree				Strongly Agree
	1	**2**	**3**	**4**	**5**
Q10. Firm seeks to improve the operational efficiency as a prior goal.					
Q11. Firm seeks for achieving cost advantage.					
Q12. Cost is the most critical component in the firm's performance measures					
Q13. Cost issues always take a prior attention in any decision making process.					
1.4 Innovation Orientation	**1**	**2**	**3**	**4**	**5**
Q14. The Firm pays close attention to innovation					
Q15. Firm ensures the need of innovation for development.					
Q16. Firm supports the need of development and utilization of new resources.					
2. E-Business Assimilation	**1**	**2**	**3**	**4**	**5**
Q17. Company is conscious about the importance of the internet to perform business.					
Q18. E-Business applications enable information sharing among employees and among units.					
Q19. E-Business applications enable information sharing between existing and potential customers.					
Q20. E-Business applications integrate all organization parts for a better customer service.					
Q21. E-Business applications enable the creativity in the online marketing and advertising					
Q22. E-Business application enable accomplishing transactions with customers through Internet					
Q23. E-Business applications enable an integrated and accurate enterprise resources planning					
Q24. E-Business applications enhance the customer relationship management					

3. Organizational Agility	Strongly Disagree				Strongly Agree
	1	**2**	**3**	**4**	**5**
Q25. The firm collects detailed information about customers frequently.					
Q26. The firm prepares future plans and demand forecasts related to its customers.					
Q27. The firm has the capability to fit time, quantity, product mix, and way of distribution to customers' expectations.					
Q28. The firm collects detailed information about its suppliers and service providers frequently.					
Q29. The firm is able to exploit the resources and capabilities of suppliers to enhance the quality and quantity of products and services.					
Q30. The firm collects information about its main competitors frequently.					
Q31. The firm pays attention to the major concerns of its competitors					
Q32. A firm responds immediately to competitors' actions					

Appendix 2: Professors' Questionnaire Jury

No.	Prof. Name	University	Faculty
1	Laith AlRobaiee	MEU	Business Admin
2	Mohammed AlNueime	MEU	Business Admin.
3	Abd AlAzeez Shrabate	MEU	Business Admin.
4	Kamil AlMughrabi	MEU	Business Admin.
5	Samir Dehayat	MEU	Business Admin.
6	Samir Barkat	ASU	Business Admin.
7	Samir AlHawari	ISU	Business Admin.