



Strategic Agility and Its Impact on the Operations Competitive Capabilities in Jordanian Private Hospitals

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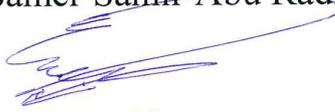
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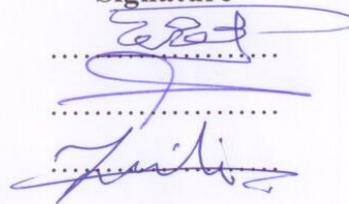
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ACKNOWLEDGEMENT

This thesis is the product of an educational experience at MEU, various people have contributed towards its completion at different stages, either directly or indirectly, and any attempt to thank all of them is bound to fall short.

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I am grateful to the 147 respondents who responded to my questionnaire and made the process of data collection speedier.

**Sincerely Yours,
Samer Abu Radi**

DEDICATION

I dedicate this work to the memory of my father Samir Abu Radi who always stood behind me, inspired me and knew that I would succeed. Gone but never forgotten.

I also dedicate it to my late friend doctor Jamal al Ahmad who encouraged and motivated me through his genuine friendship.

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Strategic Agility and Its Impact on the Operations Competitive Capabilities in Jordanian Private Hospitals

**By
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Abstract

The main objective of this study is to explore the impact of strategic agility on operations competitive capabilities in Jordanian private hospitals. The study attempted to examine the impact of strategic agility (clarity of vision, understanding core capabilities, selected strategic targets, shared responsibility, taking action) on operation competitive capabilities (innovation, service quality, delivery reliability, process flexibility and cost leadership).

This study was applied on Jordanian private hospitals located in Amman. In order to achieve the objectives of the study, the researcher designed a questionnaire consisting of (38) paragraphs to gather the primary information from the study sample. The Statistical Package for Social Sciences (SPSS) program was used to analyze and examine the hypothesis.

Although, The study results showed that there was significant impact of some of strategic agility dimensions on operations competitive capability in Jordanian Private Hospitals at level ($\alpha \leq 0.05$), that support results of (Oyedijo, 2012) which state that strategic agility actually influences the competitive performance of telecommunication firms in Nigeria and corresponds with (Ojha, 2008) results in that strategic agility enhances an organization's competitive capabilities, but it showed also that clarity of vision and understanding core capabilities have no

significant impact on operations competitive capabilities in Jordanian Private Hospitals.

Also the study showed that there was significant differences between Jordanian private hospitals in terms of strategic agility according to hospitals' number of beds.

Finally, the study recommended the following:

1. Jordanian private hospitals recommended to translate their vision into policies and procedures in order to have impact on their operation competitive capabilities.
2. Jordanian private hospitals recommended to be more aware of their capabilities (special skills and knowledge) and how to use it to maintain their competitive advantage and to create value of their customers.
3. Small Jordanian private hospitals are required to raise their strategic agility in order to increase their operation competitive capabilities.
4. Further studies recommended to be conducted in health care sector in Jordan to increase health care capabilities especially, Jordan considered as a medical destination for the Middle East region and Arab World.

CHAPTER ONE

General Framework

(1-1): Introduction

In today's fast changing and increasingly global business environment, hardly any company is safe from competition anymore. Nowadays, almost all companies operate in uncertain and dynamic competitive environments. There are many sources of changes, stemming from such factors as intensified global competition, reduction in lead-time and life expectancy of products, diversification of demand, and new technologies (Kettunen, 2009). Traditional long term strategic planning and the strategies that would not be altered are typically not anymore sources of competitive advantage, because in most industries there is no certainty about the evolution of the business environment and what it will be like a year from now (Doz and Kosonen, 2008; Hamel, 2007).

The companies must nevertheless be able to compete in sustainable ways. In the early 1990s, the concept of agile manufacturing was devised to address those considerations (Goldman, et.al., 1995; Preiss, 2005). The key is to come over with irregular and unpredictable customer's demand and environmental changes, unlike in traditional mass production. Although numerous studies have identified agility as an important quality factor succeed in a competitive marketplace, most studies have focused on the concept of manufacturing agility (Preiss, 2005).

Few researches have been done to study the determinants of strategic agility and their impact on operational and financial performance. Strategic agility is fundamentally different from manufacturing agility in that the former is knowledge based proactive

while the latter is flexibility based and reactive. Thus, strategic agility relies on gaining knowledge to anticipate market changes through inter firm collaboration while manufacturing agility relies on manipulating the speed (e.g. number of products) or nature of products (e.g. product mix) offered once a change is detected in the market. Strategic Agility describes the business flexibility and ability to be responsive in the market place. Companies that are to survive in this environment need to be in constant search for new business opportunities and sense where the next big thing might come from. Staying on top of the competition also means being able to make fast turns if that is what it takes to reach the company's big goal. A strategically agile company is well equipped to face these challenges. In this thesis the researcher explains agility and strategic agility. Then we concentrate on the importance of strategic agility on firm's performance and capabilities. Finally, we propose a framework to defining the influential element on firm's strategic agility.

(1-2): Study Problem and Research Questions

The present study is concerned with answering the following questions:

1. To what extent do the following dimensions of strategic agility (Clarity of vision, core capabilities, selected strategic targets, shared responsibility and taking action) affect on the operations competitive capabilities in Jordanian Private Hospitals?

And this question is divided into five sub-questions as follows:

- a. Is there an impact of clarity of vision on operations competitive capabilities in Jordanian Private Hospitals?
- b. Is there an impact of core capabilities on operations competitive capabilities in Jordanian Private Hospitals?

- c. Is there an impact of selected strategic targets on operations competitive capabilities in Jordanian Private Hospitals?
 - d. Is there an impact of shared responsibility on operations competitive capabilities in Jordanian Private Hospitals?
 - e. Is there an impact of taking action on operations competitive capabilities in Jordanian Private Hospitals?
2. Is there any difference according to the size of hospitals on the effect of the strategic agility on the operations competitive capabilities?

(1-3): Objectives of the Study

Considering the research questions mentioned above, the research objectives can be summarized as follows:

1. To examine the extent to which the Jordanian Private Hospitals apply strategic agility dimensions.
2. To empirically test the impact of each strategic agility dimensions (clarity of vision, core capabilities, selected strategic targets, shared responsibility and tacking action) on operations competitive capabilities dimensions (innovation, quality, delivery reliability, process flexibility and cost leadership) in Jordanian Private Hospitals.

This objective is divided into five sub-objectives as follows:

- a. To empirically test the impact of clarity of vision on operations competitive capabilities in Jordanian Private Hospitals.
- b. To empirically test the impact of core capabilities on operations competitive capabilities in Jordanian Private Hospitals.
- c. To empirically test the impact of selected strategic targets on operations competitive capabilities in Jordanian Private Hospitals.
- d. To empirically test the impact of shared responsibility on operations competitive capabilities in Jordanian Private Hospitals.

- e. To empirically test the impact of tacking action on operations competitive capabilities in Jordanian Private Hospitals.
3. To empirically test the importance of the level of operation competitive capabilities in Jordanian Private Hospitals.
4. To Identify the most influential dimension of strategic agility on operations competitive capabilities in Jordanian Private Hospitals.
5. To provide decision makers in the Jordanian Private Hospitals with a number of recommendations that will enhance their hospitals operations competitive capabilities.

(1-4): Significance of the Study

The significance of the current study is demonstrated by the following aspects:

1. To understand and measure the level of both strategic agility and operations competitive capabilities in the Jordanian Private Hospitals.
2. This research has relevance and contributions for both academic and business perspectives. This approach will yield an explanation of how, why, and when operations competitive capabilities is related to strategic agility from the perspective of multiple varying views of causality and methods for argumentation.
3. This research aims to promote greater understanding and insights into strategic agility dimensions, operations competitive capabilities as well as impact of strategic agility dimensions on operations competitive capabilities.
4. To reveal the importance of strategic agility in the healthcare sector.
5. Very few strategic agility studies are implemented on the healthcare sector in Jordan and in the Arab world.

6. The managerial contribution of this research is to provide managers insight into the event types that can cause a need for agility, the conditions under which can support a firm's sensing, responding and learning and the potential personal and organizational frictions and rigidities which can hamper business agility performance.
7. The results should also provide managers objective insights, trade-offs and building blocks for developing and managing strategic agility as a means for business agility.

(1-5): Study Model and Hypotheses

In measuring strategic agility the researcher depends on (Ojha, 2008; Long, 2000). In the measurement of operation competitive capabilities the researcher depends on (Oyedijo, 2012; Rosenzweig et.al., 2003; Nassimbeni, 2003).

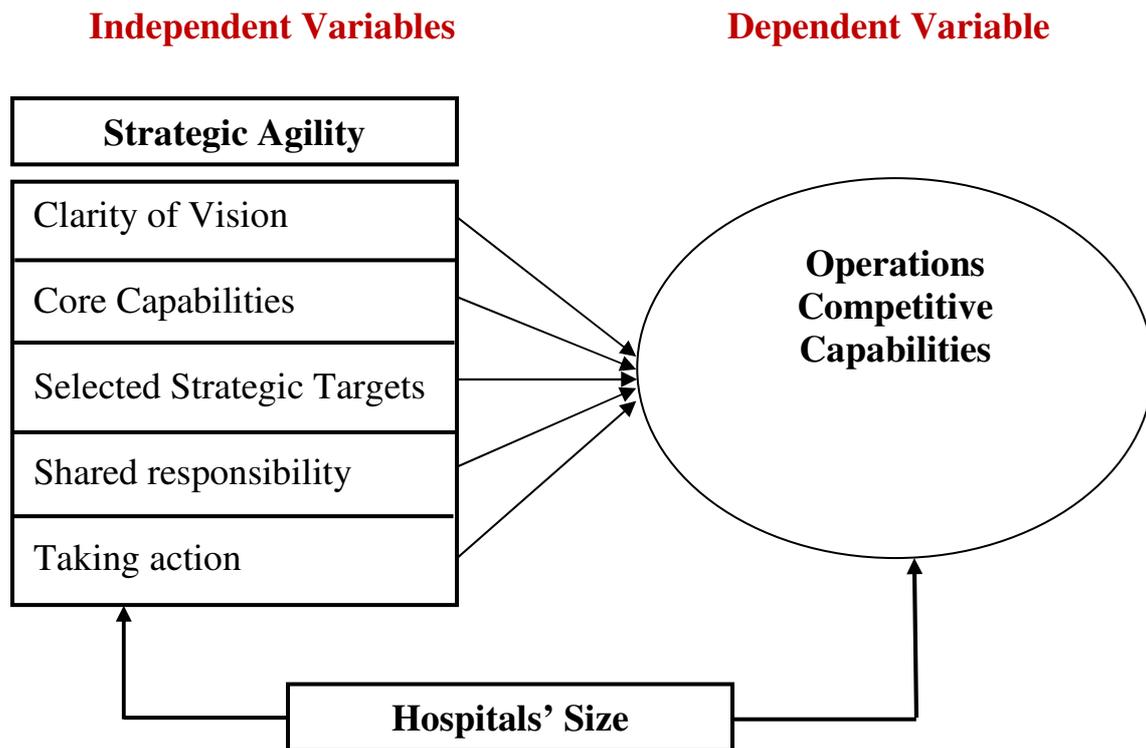


Figure (1): Conceptual Model

Source: Prepared by researcher depends on (Ojha, 2008; Long, 2000; Oyedijo, 2012; Rosenzweig et.al., 2011; Nassimbeni, 2003).

The researcher proposes that strategic agility dimensions has an important influence on operation competitive capabilities.

Based on the study problem and the literature review, the following research main hypothesis were formulated:

H₀₁: There is no significant impact of Clarity of vision on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).

- Ho₂:** There is no significant impact of core capabilities on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).
- Ho₃:** There is no significant impact of selected strategic targets on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).
- Ho₄:** There is no significant impact of shared responsibility on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).
- Ho₅:** There is no significant impact of taking action on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).
- Ho₆:** There is no significant difference between hospitals according to the hospitals' size in strategic agility (clarity of vision, core capabilities, selected strategic targets, shared responsibility, taking action) on operation competitive capabilities at level ($\alpha \leq 0.05$).

(1-6): Study Limitations

Human: The current study includes managers and head department in Jordanian Private Hospitals.

Place: Jordanian Private Hospitals in Amman City.

Time: The time needed for study accomplishment is from November 2012 to Jun 2013.

Scientific: The researcher in measuring strategic agility depends on (Ojha, 2008; Long, 2000). In the measurement of operation competitive capabilities, the researcher depends on (Oyedijo, 2012; Arteta, 2004; Nassimbeni, 2003).

(1-7): Study Delimitations (Difficulties)

1. The study concentrates on Jordanian Private Hospitals in Amman.
2. The accuracy of the study depends on Jordanian Private Hospitals staff manager's and head department respondents in that the research tool used Likert-scale , which favor perceptions over raw data.

(1-8): Study Terminologies

This section deals with the operationalization of the constructs which involves defining each construct. The operationalization process of the constructs depends upon whether it has been previously operationalized or if it is a new construct not previously operationalized.

Strategic Agility: The ability to turn on a dime, providing the right product at the right price anywhere, by leveraging value-chain-wide resources to generate economies of knowledge, manifested in five complementary abilities of Clarity of Vision, Understanding Core Capabilities, Selecting Strategic Targets, Shared Responsibility and Taking Action (Roth, 1996; Long, 2000):

Clarity of Vision: Represents a clear, compelling vision of the ends an organization is working towards and the kinds of relationships and results it hopes to create.

Core Capabilities: Represents the awareness of an organization of its capabilities and how these capabilities can be used to create value for its customers.

Selecting Strategic Targets: Refers to the awareness by an organization of how it creates value and the ability to use it to select clients who will value what the organization is best able to provide.

Shared Responsibility: Represents the involvement of your value chain partners in decision making with joint accountability for the outcomes.

Taking Action: Represents an organization's ability to use its own and its value chain partner's capabilities strategically to get results.

Operations Competitive Capability: Focal organization's strength relative to its competitors' on five operational capability dimensions of innovation, disaster immunity, quality, dependability, flexibility and cost efficiency (Rosenzweig et. al., 2003; Nassimbeni, 2003).

Innovation: Refers to the capability of an organization in developing new products, processes and working methods.

Product Quality: Refers to the capability of an organization in providing products that conform to established specifications, are reliable and provide overall satisfaction to the customers.

Delivery Reliability: Refers to the capability of an organization to deliver on time product and service consistently.

Flexibility: Refers to the capability of an organization to manufacture a large variety of products within its existing facility.

Cost Leadership: Refers to the capability of an organization to provide products (services) at competitive prices.

CHAPTER TWO

Theoretical Framework and Previous Studies

(2-1): Introduction

With the high level of uncertainty and turbulent environment, the regular way of strategic planning no anymore useful for the organization. Consequently, managing uncertainty and reducing risks should be the focus of firms. Strategic Agility has been defined as the ability to quickly recognize and seize opportunities, change direction, and avoid collisions (McCann, 2004) .Strategically agile firms utilize strategies aimed at being responsive and flexible to customer needs, while the risks of supply shortages or disruptions are hedged by pooling inventory or other capacity resources. Firms that have the capability to be responsive to the changing, diverse and unpredictable demands of customers on the front end, while minimizing the back end risks to supply disruptions (Lee, 2002) can be seen as strategically agile. If a company disregards the importance of agility, the consequences can be disastrous.

This chapter is divided into nine sections. The first four sections deals with agility, strategic agility, strategic agility forms and strategic agility and firm performance. The fifth and sixth sections deal with organization capabilities and operations competitive capabilities. The seventh section is dedicated to the relationship between study variables, the eighth is assigned to previous studies; and finally the ninth highlights the study contribution to knowledge.

(2-2): Agility

Agility concept originated at the beginning of century 20th in the research work sponsored by the US Government at Iacocca institute in 1991. There are many definitions of agility appeared based on many research conducted in this field. For instance, Goldman and Nagel (1993) defined the concept of agility as being capable of operating profitability in a competitive environment of continuously and unpredictably, changing customer opportunities. Also, agility has been defined as the capability of surviving and prospering in the competitive environment of continuous and unpredictable change by reacting quickly and efficiently to changing markets, driven by custom designed products and services (Gunasekeran, 1999).

Table (1)

Different Definitions of Agility

Definition	Reference
The ability to accelerate the activities on a critical path that commences with the identification of a market need and terminates with the delivery of a customized product.	Kumar and Motwani (1995)
A comprehensive response to the business challenges of profiting from rapidly changing, continually fragmenting, global markets for high-quality, high-performance, customer-configured goods and services.	Goldman et.al. (1995)
The ability to produce and market successfully abroad range of low cost, high-quality products with short lead times in varying lot sizes, which provide enhanced value to individual customers through customization.	Vokurka and Fliedner (1998)
The ability of an enterprise to respond quickly and successfully to change.	McGaughey (1999)

Definition	Reference
The capability of surviving by reacting quickly and effectively to changing markets, driven by customer-designed products and services.	Gunasekaran (1999)
The ability of an organization to thrive in a constantly changing, unpredictable business environment.	Rigby et.al. (2000)
The ability of enterprises to cope with unexpected changes, to survive unprecedented threats from business environment, and to take advantage of changes as opportunities.	Zhang and Sharifi (2000)
The organization's capacity to gain competitive advantage by intelligently, rapidly and proactively seizing opportunities and reacting to threats.	Meredith and Francis (2000)
It is the ability to both create and respond to change in order to profit in a turbulent business environment	High (2004)
A set of interlinked changes in marketing, production, design, and organization.	Storey et.al. (2005)
Ability to effectively change operating states in response to uncertain and changing demands placed upon it	Narasimhan et.al. (2006)

The definitions of agility illustrated in table (1) show that the common features of agility is a sense and response to the business environment AS Narasimhan et.al. (2006) for example define agility Ability to effectively change operating states in response to uncertain and changing demands placed upon it. Therefore, organizations need to be in constant research for new business opportunities and sense and being able to make fast turns in order to survive and staying on the top of the competition.

(2-3): Strategic Agility

Strategic agility means learning to make fast turns and being able to transform and renew the company without losing opportunities, Doz and Kosonen (2008). Goldman et. al. (1995) identified four strategic dimension of agile manufacturing: **First**, enriching the customer in which it will enable the company to be a permanent part of its customers' processes. **Second**, cooperating to enhance competitiveness in that it synchronizes the people and company subunits that play a role in developing actions to continuously meeting the customers' needs. **Third**, organizing to master change and uncertainty and also to capture the advantage of change and consider it as an opportunity. **Fourth**, the final strategic dimension of agility is leveraging the impact of people and information by encourage creativity, enable free flow of information and exchange of ideas, cooperation collaborative intra- and inter organizational work, individual initiative and personal responsibility (McGaughey, 1999). Strategic Agility focus in making the strategy and strategic dimensions more flexible rather than focusing on it as performance capability. Three dimensions of strategic agility namely are strategic sensitivity, resource fluidity, and collective commitment (Doz and Kosonen, 2008). Also Doz and Kosonen (2008) suggest that strategic agility is enterprise's continuous ability to make real time and accurate interpretations of the environment, to reallocate resources fast and in sufficient scale and to commit collectively to the objectives.

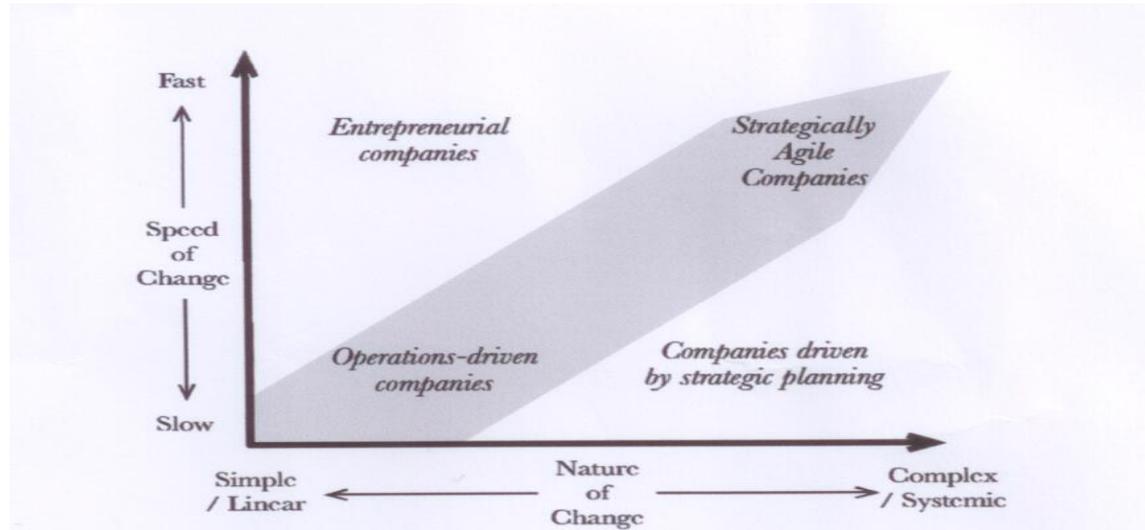


Figure (2): Companies Classification according to their response to change

Source: Doz Y. and Kosonen M. (2008). *Fast Strategy*, Wharton School Publishing, Harlow.

From the above figure operation driven companies are operating in more traditional business, entrepreneurially driven companies are operating in environment where changes simple but the speed of it is fast, strategic planning driven companies the nature of change is complex and systematic although the speed of change is not very fast yet, whereas from the figure strategically agile companies are able to operate in an environment characterized by rapid changes and the nature of the change is complex. Strategically agile organizations utilize social and relational capital to improve their knowledge and decision making abilities in a turbulent environment require strategic involvement such as increasing organization market knowledge and the nature of strategic agility is proactive.

The agile organization in terms of structure and culture has elements that differentiate it from a traditional organization. The table (2) below summarize these elements.

Table (2)
Differences between Agile Organization and Traditional Organization

	Agile organization	Traditional organization
Organizational structure	Network, platform, horizontal, flat	Pyramidal, vertical
Competence of team units	Multidisciplinary	Expertise
Information flows and decision making	Decentralized	Centralized
Role of managers	Coordination	Control
Quality of individuals	Adaptive, responsible, autonomous, creative	Efficient, respectful, compliant

Source: Audran, Arthur (2011). *Strategic agility: a winning phenotype in turbulent environments* (Master of Science in Management, Economics and Industrial Engineering), Politecnico Di Milano, Scuola di Ingegneria dei Sistemi.

From the above table an agile organization is at the platform of an ecosystem of partnerships. An agile company balances different forms of organizational structures but favor the forms tend to be more decentralized, connected and multidisciplinary. Finally, an agile company fights the inertia of bureaucracy with a culture of creativity, team working and autonomy.

(2-4): Strategic Agility Forms

Thus, as illustrated in figure (3), strategic agility can take a variety of forms which are designed for different market conditions and different strategic purposes. Form (1) (complementary augmentation). Form (2) (breakthrough conversion) can be achieved through dynamic capabilities and routines that are familiar and rehearsed, capture expertise that has been developed over time, and reflect intricate analysis, planning, and

implementation sequences. Form (3) (innovative elaboration). Form (4) (radical improvisation) can be achieved through dynamic capabilities and routines that are developed in an emergent fashion, are guided by simple rules, and are designed to absorb complexity. Both complementary augmentation (Form 1) and innovative elaboration (Form 3) build on a firm's sustaining technologies and reinforce or apply current strengths. The purpose of these forms of strategic agility is to augment and extend established organizational competencies. In contrast, both breakthrough conversion (Form 2) and radical improvisation (Form 4) emphasize disruptive technologies and to reciprocally trigger and respond quickly to discontinuous shifts in the marketplace. The intent of these latter forms of strategic agility is more akin to creative destruction in which existing competencies are unlearned and replaced by new and very different capabilities. An important issue for a firm is choosing the best form of strategic agility for existing strategic needs and recognizing the need to change forms as conditions shift.

		Market Conditions	
		Evolving Market	High-Velocity, Turbulent Market
Strategic Issue	Sustaining Technology and Complimentary Shifts	<p>Form 1 – Complementary Augmentation</p> <p>Persistent dynamic capability routines</p> <p>Complexity reduction</p> <p>Competence-enhancing strategy to continuously nurture and develop current strengths</p> <p><i>(same value proposition – same means)</i></p>	<p>Form 3 – Innovative Elaboration</p> <p>Fluid dynamic capability routines</p> <p>Complexity absorption</p> <p>Competence enhancing strategy that makes current strengths more fungible and more easily applied to alternate uses</p> <p><i>(same value proposition – different means)</i></p>
	Disruptive Technology and Discontinuous Shifts	<p>Form 2 – Breakthrough Conversion</p> <p>Persistent dynamic capability modules & subroutines</p> <p>Complexity reduction</p> <p>Competence-destroying strategy that periodically redefines the basis for value creation</p> <p><i>(new value proposition for emerging market – same means)</i></p>	<p>Form 4 – Radical Improvisation</p> <p>Fluid dynamic capability modules & subroutines</p> <p>Complexity absorption</p> <p>Competence-destroying strategy that increase variety, tempo, and unpredictability of strategic actions, business models, and value propositions</p> <p><i>(new value proposition for emerging market – new means)</i></p>

Figure (3): Form of Building Strategic Agility

Source: Doz, Y. and Kosonen, M. (2007). Strategic renewal: Building strategic agility, International Strategic Management Society Conference. San Diego, CA.

An organization's need for strategic agility is directly tied to the rate and persistence of change the firm encounters. As change becomes increasingly relentless, agility becomes essential for organizational success. Several factors underpin the overarching agility capability regardless of which form is being enacted: a unified managerial commitment, strategic acuity enabling key leaders to identify and appreciate opportunities and threats, fluid and tinker able resources that can be mobilized, reassembled, and redeployed to meet differing needs, and, adept learning, unlearning and knowledge exploitation capabilities

(Doz and Kosonen, 2007; Ghemawat and del Sol, 1998; Roth, 1996). Different dynamic capabilities, a choice between complexity reduction and complexity absorption, and an emphasis on competence-enhancing versus competence-destroying investments are then overlaid on these foundation factors to create different forms of agility to respond to market conditions and the kind of shifts that must be managed. Over time, an organization may develop a portfolio of different agility approaches to correspond to the different competitive realities it experiences.

(2-5): Strategic Agility and Firm Performance

Strategic Agility is the ability to leverage value-chain-wide resources to turn on a dime, providing the right product at the right price anywhere. This kind of agility requires a company to ‘transcend manufacturing boundaries’ to develop ‘fluid operations’. Thus, strategic agility requires a firm to metamorphose from a mechanistic (working machines) to (knowledge factory) - an organic, accelerated learning organization that produces knowledge as key by product (Roth, 1996). Hence, we can see the emergence of knowledge as the most important organizational asset to achieve strategic agility. This is in concurrence with knowledge-based view of the firm, which contends that, the most important and strategic resource of a firm is its knowledge base (Grant, 1996). Knowledge is the combination of information and human context that enhances the capacity of action (Long, 2000). A three dimensional definition of agility, that is similar to the knowledge based strategic agility concept provided by Roth (1996), was proposed by Sambamurthy et.al. (2003). This definition of strategic agility comprises three interrelated capabilities: customer agility, partnering agility, and operational agility. Long (2000) provides a measure of strategic agility which encompasses the above three dimensions of strategic agility. Their

scale consists of six dimensions-Clarity of Vision, Knowledge of Clients, Understanding Core Capabilities, Selecting Strategic Targets, Shared Responsibility, Knowledge of Competitors and Taking Action. We contend that two of the dimensions mentioned by them, namely Knowledge of Clients and Knowledge of Competitors, reflect Market acuity competency which can be used to achieve strategic agility (Hoeket.al., 2001) and are not dimensions of strategic agility.

The other five dimensions, clarity of vision, understanding core capabilities, selecting strategic targets, shared responsibility and, taking action reflect the strategic agility construct.

Clarity of Vision and Core Capabilities provide an organization the necessary combination of ‘speed and stability’ required for strategic agility. If a firm does not have the understanding of core capabilities, it will pursue opportunities it is ‘ill prepared to exploit’ (Long, 2000). Clarity of vision provides the necessary speed in execution as it gets all the value chain partners perfectly aligned and motivated to exploit relevant opportunities as and when they occur and associated with higher performance.

Select strategic targets help a firm to modify, enhance or develop its capabilities to match existing and emerging opportunities. Another important aspect of strategic agility is that a firm accrues value from building relationship with its value chain partners.

Shared Responsibility is a measure of the extent to which our relationship with the client contributes to the creation of value” (Long, 2000). A firm’s relationship with its value chain partners can create value as well as destroy it. Value creating roles are "partner", "capability builder", and "truth teller" whereas value destroying roles are "messiah", "dependency builder", and "colluder" (Carucci and Tetenbaum, 2000). Thus, value-creating roles differ from the value destroying roles in the

amount of shared responsibility in the relationship. The proportion of shared responsibility in a relationship is high for value creating roles and low for value destroying roles. This is in similar vein to the conception of strategic agility by Sambamurthy et.al. (2003) where a firm simultaneously ‘co-opts’ with all components of its value network to generate and exploit knowledge.

Taking action reflects the degree to which the firm can take on the spot action as the opportunities present themselves. Put differently this reflects the ‘speed of response’ of the firm. Due to its comprehensive coverage, and grounding in prior research (e.g. Roth, 1996; Sambamurthy et.al., 2003), we use this five-dimensional conceptualization of strategic agility.

From the definition of shared responsibility and taking action, we can conclude that an organization ability to adapt its strategy and involvement their key people in discussion of its strategy come through its ability to provide access to information to its clients and keep them fully involved in the planning and execution of projects .

(2-6): Organization Capabilities

Organization resources are the assets that build the basic blocks of an organization, divided into tangible assets such as its plant, equipment, finances, and human resources in terms of no. of employees and their skills, and intangible assets such as culture, brand name, copyrights and patents. Resources are defined as: “stocks of knowledge, physical assets, human capital and other tangible and intangible factors that a business owns or controls, which enable a firm to produce, efficiently and/or effectively, market offerings that have value for some market segments” (Capron and Hulland, 1999: 42).

Teece et.al. (1997) see resources as “...the firm specific assets that are difficult, if not impossible to imitate”, whereas competencies result from the integration of firm specific assets, they are described as the local abilities and knowledge that are fundamental to day-t-day problem solving (Henderson and Cockburn, 1994). Capabilities refer to organization ability to exploit its resources; they consist of business processes to turn inputs into outputs (Wheelen and Hunger, 2010).

When organization constantly change and reconfigure their capabilities to make them adaptive to uncertain environment, they are called dynamic capabilities. Helfat and Ranbitscheck (2003) mentioned that dynamic capabilities are embedded in “routine organizational processes that guide the evolution of a firms’ resource configuration and operational routines”. Teece and Pisano (1997) stated that management’s role is to organize competencies to create capabilities that customer’s desire. Thus, organization competitive capability reflects its ability to meet customer expectation compare to its competitors’ ability.

(2-7): Operations Competitive Capabilities

Operations competitive capabilities of a supply chain are the indicators of effectiveness of strategic agility. These capabilities should be the immediate measures of performance so that corrective measure can be taken in time to improve the supply chain performance. A generic list of competitive capabilities of a strategically agile firm is responsiveness, competency, flexibility and speed (Zhang and Sharifi, 2000).

The major driving forces of strategic agility (advance manufacturing technology, better information systems etc.) are increasing customer power and the pace of innovation. Hence, competitive capabilities of a strategically agile firm should conform to customer satisfaction and innovation/learning perspectives. Therefore, customer

view of product/service, timeliness, flexibility and value along-with innovation and learning dimensions like product/process innovation, partnership management, information flows, threats etc. have become important competitive dimensions (Ren, 2007). Toni (2001) conceptualized performance and competitive capabilities of a firm into costs/productivity, time (run and set-up times, wait and move time, system times, delivery speed, reliability and time to market) flexibility (volume, mix, product modification, process modification and, expansion flexibilities) and quality (produced, perceived and inbound quality and quality costs). These capabilities not only ensure viability of a firm but also contribute towards the achievement of leadership status by the firm. Competitive capabilities can be divided into four categories: product quality, delivery reliability, process flexibility and cost leadership (Rosenzweig et al., 2003). Chen (2004) lists competitive capabilities of a supply chain as volume flexibility, delivery, delivery reliability/dependability, product conformance to specification, rapid confirmation of customer orders, rapid handling of customer complaint and customer satisfaction. Using the literature, the operations competitive capabilities were operationalized into five dimensions.

1. Innovation.
2. Quality.
3. Dependability.
4. Flexibility.
5. Cost efficiency/leadership.

(2-8): The relationship among study variables

Strategic Agility is the ability to leverage value-chain-wide resources to turn on a dime, providing the right product at the right price anywhere. This kind of agility requires a company to ‘transcend manufacturing boundaries’ to develop ‘fluid operations’. Thus, strategic agility requires a firm to metamorphose from a mechanistic (working machines) to (knowledge factory) - an organic, accelerated learning organization that produces knowledge as key by product (Roth, 1996). Hence, we can see the emergence of knowledge as the most important organizational asset to achieve strategic agility. This is in concurrence with knowledge-based view of the firm, which contends that, the most important and strategic resource of a firm is its knowledge base (Grant, 1996). Knowledge is the combination of information and human context that enhances the capacity of action (Long, 2000). As Long (2000) provides a measure of strategic agility which encompasses the above three dimensions of strategic agility. Their scale consists of six dimensions-Clarity of Vision, Knowledge of Clients, Understanding Core Capabilities, Selecting Strategic Targets, Shared Responsibility, Knowledge of Competitors and Taking Action. We contend that two of the dimensions mentioned by them, namely Knowledge of Clients and Knowledge of Competitors, reflect Market acuity competency which can be used to achieve strategic agility (Hoek et.al., 2001) and are not dimensions of strategic agility. Strategic agility requires from an organization to be strategic and agile at the same time. Strategic agility requires a firm to use its inter organizational resources to renew and supplements its knowledge base and because of that strategic agility emphasize on thinking and a clear vision instead of strategic planning and demands both looking within the company in order to understand core

capabilities and also looking outside in order to learn about business environment.

Vision is a critical to a firm's success. A vision is a shared understanding of what the organization is trying to achieve. It is a picture of the future. A clear vision is regarded as one of the critical factors for creating effective change. Successful change requires a shared vision and commitment by all organizations' members (Goh, 2003). In addition to knowing most appreciative customers and how organization create value for them, organization also need a clear sense of purpose to guide and coordinate actions. Organization should create a vision that is clear and associates with how organization want to work with its clients and how organization wants its practice to be seen by others. A clear vision provides the internal stability necessary to encourage the pursuit of change.

As agility will result in an organization that has innovative management structure with highly-skilled, motivated and empowered people who work as a team with the support of flexible, smart technology and systems for the proper management of knowledge and learning (Kidd, 1995) and based on the previous studies that some groups of agility enablers are human resources practices and practices relating to internal organization and external relations, based on cooperation and integration of operations among departments and between an organization and external agents and this give an organization the ability to know their special skills, knowledge and which are most critical to provide services that are important to the customers. Additionally once business unit can determine their skills and know their core competencies, it be able to identify the market segments and able to creates value for selected clients. Organization having a good grasp of its core capabilities enhance its

ability to assess new opportunities as they emerge. To separate elements interact to form core capabilities:

Core competencies: the special skills, knowledge, technology, and know-how that distinguish organization from others.

Strategic processes: the business processes organization use to deliver its special know-how in the form of products, services, and other results that have value to customers (Long and Vickers-Koch, 1995).

A clear vision that is shared with client is an important prerequisite for developing shared leadership with clients and joint responsibility for the results of an assignment. Sharing of responsibility through employee involvement and empowerment, team working, self-directed teams, cross-functional teams, decentralized decision making and rewards schemes to encourage innovation, customer integrated processes for designing, manufacturing, marketing, and support, also strategic relationship with customers, close relationship with suppliers; trust-based relation with suppliers/customers will enhance sharing of responsibility and give an organization the knowledge and learning about the external and internal environment which will keep it in touch with changes around it.

According to different studies and researches conducted in this field, we can see that primary source of strategic agility is the knowledge base of an organization, strategic agility requires strategic interference like developing market knowledge, recombining capabilities to achieve better fit with environmental changes, strategic agility also use inter-organizational resources like social capital to manage change. Also, strategically agile organizations use social and relational capital to improve their knowledge and decision making abilities. Selecting targets effectively requires a good knowledge both of competitors and the landscape in which the targets exist and determine which market/client segments to go after with which products/services is always an important

issue. Placing action at the end of the list of requirements of strategic agility is clearly a case of “last but not least”, and even though how all of the requirements of strategic agility achieved, nothing happen until action is taken. It needs to be action with direction, guided by a clear vision and strategic thinking.

Whereas strategic agility is proactive in nature, it needs from an organization to respond quickly to changes and this can't be achieved unless there is a proactive response to unpredictable changes which can be gain through continues renewing of an organization knowledge and understanding core capabilities of its business units and this is why strategic agility demands both looking within the company in order to understand core competences and looking also outside in order to learn about the business environment.

Agility also is can be defined as integration of technology, human resources and organization by creating infrastructure, granting flexibility, speed, quality, and making it possible to respond quickly.

Accordingly, an organizations that are able to operate successfully in turbulent environment and show high level of agility need to adapt to:

- Relatively unpredictable changes in environment.
- Highly-populated, competitive markets with one or more critical and scarce resources.
- Close links between firms and their suppliers, distributors, customers and competitors and,
- varied products, lines, customers or businesses.

Also, Fartash and Davoudi (2012) mention that the most important ingredients to achieve strategic agility relate to willingness to change, the internal readiness to adapt to changes in the environment, presence of and both physical and virtual knowledge exchange channels and the ability to sense changes in the market place.

Fliedner and Voukurka (1997) state that a firm could maintain superior agility and thus provide customers with better value by achieving cost efficiency, quality improvement, dependability, and flexibility.

Yusuf et al. (1999: 37) state that agility is reflected in "... the successful exploration of competitive bases (speed, flexibility, innovation, proactivity, quality and profitability) through the integration of reconfigurable resources and best practices in a knowledge-rich environment to provide customer driven products and services in a fast-changing market environment.

Also Gehani (1995) emphasize that an agile organization can quickly satisfy customer orders, introduce new products frequently in a timely manner ... get in and out of its strategic alliances speedily and as Ren, Yusuf and Burns (2000; 2005) have suggested that agile organization deliver better on cost, quality, speed, flexibility and innovation simultaneously without compromising on any of these criteria (Oyedijo, 2012).

Additionally, Fartash and Davoudi (2012) conclude that according to competence-capability-performance strategic agility has impact on both operational and competitive performance of an organization. Strategic agility has the capability to positively influence competitive performance and operations competitive capabilities, and implementing strategic capabilities enhances an organization's operations competitive capabilities.

However it is important to mention that even though that strategic agility has frequently been promoted as a means of improving business competitiveness, little empirical evidence exists in the literature validating its positive link with competitive capabilities and business performance.

On the basis of a thorough review of literature, a conceptual model of strategic agility is presented, describing the links between the strategic agility dimensions depend on both Roth and Miller (1990) competence-capability-performance framework which suggest that strategy influences a firm's performance via the development of competencies that can be renewing organizational capabilities and Long (2000) measurements of strategic agility. And from this competence-capability-performance based framework we suppose that implementing strategic agility will attain competitive capabilities depend on Ren, Yusuf and Burns (2000; 2005) suggestions.

Therefore, a positive link can be expected between strategic agility variables and its impact on operations competitive capabilities.

(2-9): Previous Studies

1. **Rosenzweig et.al. (2003)** entitled **“The influence of an integration strategy on competitive capabilities and business performance: An exploratory study of consumer products manufacturers”**.

In this paper, researcher investigate the ways that manufacturing-based competitive capabilities mediate the relationship between supply chain integration and business performance. Using hierarchical regression analysis, we develop and test a theory-based model using a sample of consumer products manufacturers. Contrary to Frohlich and Westbrook's assertions regarding the applicability of the 'outward-facing strategy' to the consumer goods sector, our results provide empirical evidence that supply chain integration intensity leads directly to improved business performance, thus corroborating the conventional wisdom concerning the increasing importance of supply chain integration in the consumer products sector. In addition, this study uncovers empirical evidence for

the mediating role of manufacturing-based competitive capabilities in supply chain management. These results support the growing call for a broader, more generalized view of manufacturing strategy.

2. **Nassimbeni (2003)** entitled “**Small and medium district enterprises and the new product development challenge**”.

This study describes the results of an empirical research on a sample of small and medium enterprises belonging to one of Italy’s most important local manufacturing systems: the eyewear district. The main objective of the project was to suggest ways of improving new product development within the small and medium enterprises of the district. Data were collected from five buyer firms and 49 subcontractors, and experts of the local system were interviewed in order to acquire information on the product development process. The study: highlights the distinctive aspects of eyewear products and the consequent design and manufacturing specificity; maps the product development activity; identifies difficulties and problems SMEs usually encounter in these activities; and suggests how improvements can be made.

3. **Arteta (2004)** entitled "**A measure of agility as the complexity of the enterprise system, Robotics and Computer-Integrated Manufacturing**".

This study describes how agility is the ability of an organization to adapt to change and also to seize opportunities that become available due to change. While there has been much work and discussion of what agility is and how firms can become agile there is little work at measuring the agility of a firm. Measurement is necessary for the strategic planning of determining how much agility an organization currently possesses, determining how much is needed, and then for assessing the gap and formulating a strategy for closing any perceived weaknesses. The measurement of agility as defined is difficult to measure since it must be

measured in the context of a change. Consequently, most current agility measurement approaches are backward looking. In this study a different and novel approach is to use complexity as a surrogate measure for agility. The hypothesis supporting this substitution is that a less complex enterprise in terms of systems and processes is easier to change and consequently more agile. To test this idea a model and measurement approach for measuring complexity is presented. The model uses Petri Nets to find the state space probabilities needed for the complexity measure. The contribution of this research is the quantification of complexity at the business process level and description of a method for conducting this measure.

4. **Vázquez-Bustelo et.al. (2007)** entitled **“Agility drivers, enablers and outcomes: Empirical test of an integrated agile manufacturing model”**.

Because of little empirical evidence exists in the literature validating agile manufacturing positive link with business performance. This research analyze agile manufacturing in Spain and study whether it is a critical factor for success in different industries. The results show that, in turbulent environments, the integrated use of agile manufacturing practices promotes manufacturing strength, leading to better operational, market and financial performance.

5. **Scheepers and Hobbs (2009)** entitled **“Identifying Capabilities for the IT Function to Create Agility in Information Systems”**.

In this paper, the necessary capabilities of the IT function to create agility in existing information systems identified. Agility is the ability to quickly sense and respond to environment perturbations. Researchers contrast the agility perspective from a widely used industry framework with research perspectives on agility in the IS literature and suggest Beer’s Viable System Model (VSM) is a useful meta-level theory to

house agility elements from IS research literature, and apply VSM principles to identify the capabilities required of the IT function. Indeed, by means of a survey of 34 organizations, confirm that the meta-level theory better correlates with reported agility measures than existing practice measures do on their own. From a research perspective, the incorporation of the VSM mechanism helps to explain ‘why’ the IT function is capable of creating agility. From a practical perspective of ‘how’, the findings point to a new set of capabilities of the IT function for future versions of the industry frameworks to enable agility.

6. **Bernadre et.al. (2009)** entitled "**a theoretical review of flexibility, agility and responsiveness in the operations management literature: toward a conceptual definition of customer responsiveness**".

The aim of this paper was to clarify the differences between the terms flexibility, agility and responsiveness. According to the high quick and permanent increase in competition between manufactures and services firms, the rapid technological change, shorter product life cycle, and customer unwilling, the responsiveness of a firm become the most important capabilities necessarily to achieve competitive advantage. However, operation management literature, indicate ambiguity regarding the use of the responsiveness construct. This paper addressed the differences among flexibility, agility and responsiveness; add a contribution to the operation management literature by proposing empirical definitions and a conceptual differentiation between these terms constructs. A hierarchical interrelationship between the terms proposed, in which flexibility associated with the inherent property of systems that allows them to change within pre-established parameter; agility term used when it describes an approach provides for rapid system modification to face the unforeseeable and unpredictable changes, and responsiveness

refer to a system behavior involving timely purposeful change in the presence of modulating stimuli.

7. **Xenophon et.al. (2009)** entitled **“Examining the competitive capabilities of Manufacturing Firms”**.

Manufacturers compete in a complex and uncertain environment with growing global competition, changing and emerging markets, and increasing levels of manufacturing technology. Order winning hinges on their ability to achieve a set of competitive capabilities that have an external, customer orientation and manifest the relative strength of the individual firm against its competitors. This study proposes a framework for research on competitive capabilities, reports on the development of a set of constructs for measuring those capabilities, and tests relations among them. The constructs measure flexible product innovation, quality, delivery dependability, competitive price, and premium price. The constructs are reliable across industries. Tests of a structural model suggest significant relations among the competitive capabilities and significant, positive, and direct-indirect relations between the competitive capabilities and profitability. Results are based on a sample of 244 firms across 4 industries.

8. **Hallgren and Olhager (2009)** entitled **“Lean and agile manufacturing: external and internal drivers and performance outcomes”**.

This paper addressed the difference between lean manufacturing and agile manufacturing, explore lean and agile manufacturing in terms of internal and external drivers and the impact on performance. The researchers designed the research framework in that competitive intensity and competitive strategy are modeled as a driver of both lean and agile manufacturing. Competitive intensity designed as direct and indirect driver through competitive strategy. Competitive strategy modeled as

manufacturing ability improvement in terms of cost, quality, delivery and flexibility. Data from 211 plants of high performance manufacturing from three industries and seven countries collected. The respondents were asked to indicate on a seven-point Likert scale ranging from “strongly disagree” to “strongly agree” on a number of assertions in the four items used to capture the competitive intensity of industry. In order to measure cost leadership and differentiation for competitive strategy, five-point Likert scale ranging from “absolutely crucial” to “least important” used. A structural equation modeling approach was used. Paper findings were that a cost-leadership strategy is well aligned with lean manufacturing operations capabilities and cost performance, and a differentiation strategy is well aligned with agile manufacturing operations capabilities and flexibility performance.

9. **Zelbst (2010)** entitled **Relationship among Market Orientation, JIT, TQM, and agility.**

This paper investigate the adoption of market orientation coupled with implementation of just-in time, total quality management, and agile improvement program within manufacturing organization . This research addressed the direct relationship between market orientation with just-in time, total quality management and agile manufacturing and its impact on operational and logistic performance. The researchers argued that these terms work together to enhance organizational capabilities of efficiency, quality and responsiveness that are important in gaining competitive advantage and for improving performance. The study also emphasize that also market orientation, just-in time and total quality management are vital precursors to agility, which impacts on operational and logistic performance. A path analysis methodology performed in this study based on data collected from 104 manufacturing managers, supervisors and quality professionals. The study theoretical model incorporate ten

hypothesis, each one is theorized as being having a direct and positive impact. Researchers according to the results concluded that market orientation is positively associated with just-in time, total quality management and agility manufacturing and also has indirect impact on operational and logistic performance through agility manufacturing. Implementation of just-in time strategy is necessary precursor for the successful implementation of total quality management strategy, and implementation of total quality management is a necessary precursor for agility manufacturing. Agility manufacturing directly affects both operational and logistic performance, and also it indirectly impacts on logistic performance through operational performance.

10. **Too et.al. (2010)** entitled **“globalisation and corporate real estate strategies”**.

This paper addressed the interrelationship between globalisation and real estate capabilities. This paper discussed the relation of globalisation driven factors and its impact on business climate, it introduces the concepts of dynamic capabilities, discusses the connection between business strategy and corporate real estate and identified the corporate real estate capabilities, this paper asserted that for the company to remain competitive it has to review its current practice. The dynamic capabilities related to skills and intangible assets and they are considered as a source of competitive advantage because they are difficult to imitate, the paper proposed the development of three dynamic corporate real estate capabilities which include flexibility, network organization and managerial learning capabilities.

11. **Doz and Kosonen (2010)** entitled **"Embedding Strategic Agility A Leadership Agenda for Accelerating Business Model Renewal"**.

Strategic discontinuities and disruptions usually call for changes in business models. But, over time, efficient firms naturally evolve business

models of increasing stability - and therefore rigidity. Resolving this contradiction can be made easier by developing three core meta-capabilities to make an organization more agile: strategic sensitivity, leadership unity and resource fluidity. This article reviews the underlying determinants of these capabilities, based on detailed research undertaken in a dozen companies who were re-conceiving their business models - among others, Nokia, easy Group, HP, SAP and Kone are used as examples. We propose a repertoire of concrete leadership actions enabling the meta-capabilities needed to accelerate the renewal and transformation of business models. To organize our argument we borrow the three main dimensions of the strategic agility framework presented in our earlier work, and develop corresponding vectors of leadership actions, each of which can enhance a firm's ability to renew its business models.

12. **Yauch (2011)** entitled “**measuring agility as a performance outcome**”.

Agility concept first introduced in 1991, and has captured the attention of many manufacturers as the business environment became dynamic. However, it is difficult to determine whether the firm is agile or not and the level of its agility. Agility measurement methodologies has in a wide variety of types and styles, some relate to specific types of business process, some emphasize agility across supply chains, others relate it on individual business units, some focus on internal operational measure and ignore the business environment. This paper presents a quantitative index of agility, based on a conceptualization of agility as a performance outcome, which capture both the success of an organization and the turbulence of its business environment. A simple 2×2 matrix was conceptualized to pertain the four possible combinations of environmental turbulence and organizational success. The panel study consisted of four manufacturing managers, referred to as companies W,

X, Y and Z in order to protect confidentiality. The methodology used in calculating agility consists of separately assessing environmental turbulence and success, and then combining these into a final agility score, depending on a case study, and survey data collected from a variety of manufacturing plants, as well as inputs from a panel of manufacturing experts, the resulting agility index has several advantages:

- a. Applicable to any type of manufacturing organization.
- b. Agility assessment is possible for many types of manufacturers.
- c. Agility comparisons can be made between manufacturers in different industries.
- d. Repositions the expectation for what it takes to be considered successful.
- e. A useful framework for scholars and practitioners.

13. **Aronsson et al. (2011)** entitled “**developing lean and agile health care supply chains**”.

Due to decreasing resources and increasing demands, health care have to find new approaches in order to maintain and improve quality services provided and at the same time reducing the costs. Although, the supply chain management has been adopted and applied in many industries, the health care has been extremely slow to embrace the practices of supply chains management. The objective of this paper is to identify what is most important when developing supply chain in health care, what is required to establish and how lean and agile can be used as process strategies in order to improve supply chain performance, an illustrative example was provided from a twelve health care Swedish organizations ranging from large hospitals to single departments involved in this study, describing the patient flow and planning processes. The study is based on a systems approach, describing the supply chain, the functions according to a framework of supply chain design developed by

Aronsson (2000), the study found that, in order to apply supply chain management in a health care , it has to be organized for quick response and flexibility through combining lean and agile process strategies. That can be done when a system approach is applied together with strategic orientation, where cooperative efforts by the supply chain members should synchronize and converge operational and strategic capability into a unified whole.

14. **Hallgren et.al. (2011)** entitled "**A hybrid model of competitive capabilities**".

The purpose of this paper is to present and test a new model for competitive capabilities. Traditionally, a cumulative model has been viewed as having one sequence of building competitive capabilities in a firm in support of market needs, including quality, delivery, cost efficiency and flexibility. Although appealing as a conceptual model, empirical testing has not been able to fully support the cumulative model. This paper acknowledges the need for a hybrid approach to managing capability progression. It brings together the literature on trade-offs, cumulative capabilities, and order winners and qualifiers. A new hybrid approach for modeling competitive capabilities is tested empirically using data from the high performance manufacturing (HPM) study, round 3, including three industries and seven countries - a total of 211 plants. The hybrid model shows significantly better fit with the data from the sample than the cumulative models suggested by previous literature. Empirical support is found for the traditional perception that a high level of quality is a prerequisite for a high level of delivery performance. However, cost efficiency and flexibility do not exhibit a cumulative pattern. Instead, the results show that they are developed in parallel. The findings suggest that a balance between cost efficiency and flexibility is built upon high levels of quality and delivery performance.

15. **Apicha (2012)** entitled “**Competitive Capabilities of Thai logistics Industry: Effects on Corporate Image and Performance**”.

This study was carried out to investigate competitive capabilities of firms operating in the logistics industry. The objective of the research was to study the effects of strategic elements associated with competitive capabilities on corporate image, profitability, and growth. Key strategic elements for building competitive capabilities were proposed to consist of service quality, marketing capabilities, and management capabilities. The results suggest that the firms’ first priority level in building competitive capabilities must rest on rendering reliable and speedy services, providing varying services, and offering attractive prices. The second priority level is to provide rapid customer response, make service facilities available and attractive, make sure that service location is convenient for access, and utilize up-to-date IT to improve service operations.

16. **Oyedijo (2012)** entitled “**Strategic Agility and Competitive Performance in the Nigerian Telecommunication Industry: An Empirical Investigation**”.

This paper examines the relationship between strategic agility and competitive performance using data generated from nine (9) firms in Nigeria’s telecommunication industry. A five-point Likert type scale based on 21-items derived from existing literature was used to measure and assess the location of the sampled telecommunication firms on different dimensions of strategic agility. Using a multiple-informant survey, respondents’ rating on all the strategic agility items were summed up and averaged to obtain a strategic agility index for each participating firm. Strategic agility data were generated from the questionnaire that was completed by members of the Top Management Team (TMT) of each company. Data on profit growth, sales revenue, financial strength, operating efficiency and performance stability were collected from the

firms' records. Results from the analysis showed a significant relationship between strategic agility and competitive performance. It was found that strategic agility influences the competitive performance of telecommunication firms in Nigeria (with a coefficient of 3.419). It was also found that strategic agility has a significant impact on and is a good predictor of competitive performance ($R^2 = 0.610$).

17. **Bhāleand Mishra (2012)** entitled "**Strategic Agility; Business Approach of Multinational ICT Firms in Indian Context**".

The purpose of this paper is to study the phenomenon of globalization in ICT and the respective strategic implications firms-like IBM, CISCO, and HCL have made in Indian context. The paper aims to explore strategic propositions of ICT (Information and Communication Technology) industry and strategic agility these firms have been exhibiting phenomenally in recent years. This paper is conceptual in nature wherein qualitative method has been used to substantiate the significant issues of international business scenario of ICT especially in Indian sub-continent. An attempt is made to explore the strategic approach in order to make certain vital observations to lay down conclusion. The paper contemplates that globalization in fact has made a paradigm shift in strategic planning of global ICT companies in order to categorize innovation as new trend of business performance and so called successful strategy in their respective domain. Paper provides an insight about the strategic integration of globalization, innovation and technical aspects of the business practices uses by multinational ICT companies. The studies along with literature review underlay significance of global strategy firms are adopting creating value on local and international levels.

18. **Fartash and Davoudi (2012)** entitled "**The Important Role of Strategic Agility in Firms' Capability and Performance**".

Agility in firms has been recognized as a strategy to succeed in highly competitive and dynamic environments. Strategic Agility, not just manufacturing agility, is essential and required in today's hyper-competitive environment. This paper seeks to explore the element of 'strategic agility' and the implications of having strategic agility under different levels of environmental change. This paper uses a Competence-Capability-Performance. Framework with the theoretical perspectives of dynamic capability, strength of weak ties and knowledge- based view of competitive advantage to explicate how a firm can implement strategies to build the required competencies to gain 'strategic agility capability'. Furthermore, the importance of strategic agility on operational and financial performance under various levels of environmental change is explained.

19. **Uosefi and Hamid (2012)** entitled "**Improvement of Corporation Strategic Factors in Airline Industry Using Fuzzy & OFD Model**".

Agility, the ability to sense and respond effectively to market changes, has become imperative to creating and maintaining a competitive advantage in today's volatile global markets. Firms are addressing the growing need for increased agility by leveraging information technology (IT) to sense changes in the market and to orchestrate a coordinated response to these changes throughout the corporation. There is a new paradigm in the strategic management namely strategic agility or SA (the ability to turn on a dime, providing the right product at the right price anywhere by leveraging value-chain-wide resources to generate economies of knowledge). This study categorized in four main steps as below: 1. Identifying strategic agility indicators in airline industry based on 14 managers points of view in two Iranian

airlines, 2. Prioritizing indicators using fuzzy MADM because of strategic agility vagueness, 3. Gap analysis between responder's perception and expectations, 4. Transferring critical indicators (high importance, low performance) as quality function deployment input. After these steps we found 10 key success factors for SA improvement among airline industries. Our findings suggest that strategy outsourcing and daily feedback can improve the level of SA in short time.

20. Chiang et.al. (2012) entitled **“An Empirical Investigation of the impact of strategic sourcing and flexibility on firm's supply chain agility”**.

The development in the business environment that characterized by globally extended supply chain and volatile patterns, and as of the importance of issues related to supply chain disruptions risk gain the supply chain agility attention over the last decade. Many research conducted on the issues regarding the terms flexibility, agility and responsiveness. This study defined flexibility based on Swafford et.al. (2006) definition, where firms supply chain agility is defined based on Braunscheidel and Surach(2009) definition. Also the strategic sourcing is defined as a construct consisting of four sub-construct which are: strategic purchasing, inter-functional integration of purchasing, information sharing with suppliers and supplier development. The study also based on theoretical platform that considering strategic sourcing and flexibility as internal competencies leading to the capability of agility. The study examined the relationships among strategic sourcing, flexibility and agility within the theoretical framework of a competence-capability relationship, utilized a dynamic capability perspective and explored whether flexibility is a possible mediator between strategic sourcing and agility or not and if it affect the direct relationship between strategic sourcing and agility. A structural equation modeling applied to

test these relationships. Data from 144 US manufacturing firms were collected and five-point Likert scale was used with two different schemes: very low to very high, and strongly disagree to strongly agree. Strategic sourcing was found to be a direct antecedent of firms' supply chain agility and also had an indirect relation through the firms' strategic flexibility. The study supported the notion that the implementation of strategic sourcing enhancing firms supply chain agility in order to adopt or response in a speedy manner to market changes before and after it occurred. Also strategic sourcing has a significant and positive influence on product design - related flexibility, confirmed that flexibility is a valid antecedent to develop agility and emphasize on that firms supply chain agility is a critical capability for survival in dynamic business environment.

21. **Onyema and Akanbi (2012)** entitled **“The influence Of Strategic Agility On The perceived Performance Of Manufacturing Firms In Nigeria”**.

The performance of a company depends on its activities and activities of its competitors, customers, suppliers, partners and governments. These activities could wholly referred to as the business environment (Turban et.al, 2008). Organizations must respond to the challenges and opportunities by the business pressures in order to survive or gain sustainable competitive advantages. The study indicated that strategic agility as measured by strategic sensitivity, collective commitment or leadership unity and source fluidity can have a significant impact on the performance of manufacturing firms. There was a recommendation that firms should be proactive rather than reactive in order to effectively deal with changes in the complex business environment and also improve their performance .

22. **Fartashand Davoudi (2012)** entitled "**The important role of the strategic agility in firms' capability and performance**".

This paper explore the elements of strategic agility and the implication of having strategic agility under different levels of environmental change use a competence - capability - framework with the theoretical perspective of dynamic capability. This paper conclude that the most important thing to achieve strategic agility, relate to the willingness to change, the internal readiness to adopt changes into environment, presence of and both physical and virtual knowledge exchange channels and the ability to sense changes in the market place. Agility has greater value in conditions of environmental changes as it enables firms to achieve a fit between supply side capabilities and the demand of the market.

23. **Kangkang et.al. (2012)** entitled "**Alternatives form of fit in distribution flexibility strategies**".

According to highly uncertain environment and highly competition, many firms have implemented flexible strategies, this paper is focus on distribution flexibility and how organizations make strategic choices among different distribution flexibility strategies. The results show that, given different circumstances, firms might choose an appropriate distribution flexibility strategy which fits with their distribution environment in the contingency theory sense of matching.

(2-10): Study Contribution to Knowledge

It is evident from the previous discussion that inter-organizational elements play an important role in the development of strategic agility. However, it is not very clear how inter-organizational elements can be leveraged by operations managers to achieve strategic agility as little research has been conducted in this area.

To clarify what distinguishes the current study from previous studies, some comparisons have been made, which were presented as follows:

1. Most of the previous studies have been mainly focusing on manufacturing industries, while this one is all about a healthcare sector.
2. most studies have been mainly conducted in American, European and Asian countries. Whereas the current study was carried in an Arab country, namely the Jordan.
3. Previous studies aimed to identify the role of strategic agility on organization performance through competitive capabilities, where this study focus on the impact of strategic agility on operations competitive capabilities.

CHAPTER THREE

Methodology of the Study

(3-1): Introduction

This chapter described the methodology of study used, the study population and sample, study tools and data collections. Discussion of statistical treatment that used in the analysis of the collected data addressed. Finally, the validity of questionnaire and reliability analysis that was applied been clearly stated.

(3-2): Study Methodology

Descriptive research involves collecting data in order to test hypotheses or to answer questions concerned with the current status of the subject of the study.

Typical descriptive studies are concerned with the assessment of attitudes, opinions, demographic information, conditions, and procedures. The research design chosen for the study is the survey research. The survey is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables. The survey research of knowledge at its best can provide very valuable data. It involves a careful design and execution of each of the components of the research process.

The researcher designed a survey instrument that was administrated to the research sample. The purpose of the survey instrument was to collect data about the attitudes toward on strategic agility and operations competitive capabilities.

(3-3): Study Population and Sample

The population of the study consists of the managers and head of departments working in the Jordanian Private Hospitals located in Amman city. The private Jordanian Hospitals are divided into two categories according to its beds size (more than 73 beds and lower than 73 beds). Due to lack of manager and head of departments data base regarding the Jordanian Private Hospitals, the researcher has employed the convenience sampling method to obtain a sample of these hospitals probably. Based on the size of the hospitals, five questionnaires were personally delivered to the Private Hospitals that had less than (73) beds, and (20) questionnaires were delivered to those that have more than (73) beds.

Table (3) shows the members of private hospitals in Private Hospital Association in Amman city in Jordan. The researcher delivered (233) questionnaires to the hospitals which (147) were returned indicating response rate of (63%) valid for the analysis.

Table (3)

Private Hospitals in Amman City

Study population name	Address	No. of beds
Al-Shmaisani Hospital	Tel: 00962-6-5607431 www.shmaisani-hospital.com	75
Abdulhadi Eye Hospital	Tel: 00962-6-4627628 www.ahhospital.com	15
Akilah Hospital	Tel: 00962-6-4642441 e-mail.: non	30
Al Hanan General Hospital	Tel: 00962-6-4750800 e-mail.: none	30
Al Hayat General hospital	Tel: 00962-6-4391111 www.alhayathos.net	90
Al Khalidi Medical Center	Tel: 00962-6-4644281 www.kmc.jo	116
Al Rashid Hospital	Tel: 00962-6-4722248 www.alrashid-hospital.com	120
Al-Alaqla Hospital	Tel: 00962-6-5065064 e-mail.: non	20

Study population name	Address	No. of beds
Al-Bayader Hospital	Tel: 00962-6-5853375 e-mail.: non	15
Al-Mowasah Hospital	Tel: 00962-6-4896842 www.mowasah-hospital.com	42
Amman Surgery Hospital	Tel: none e-mail.: none	71
Arab Medical Center	Tel: 00962-6-5921199 www.amc-hospital.com	144
Dr. Ahmed Hamaideh Hospital	Tel: 00962-6-4785555 e-mail.: none	53
Essra Hospital	Tel: 00962-6-5300300 www.essrahospital.com	160
Eye Specialty Hospital	Tel: 00962-6-5511176 e-mail.: none	44
Hiba Hospital	Tel: 00962-6-5696103 www.hibahospital.com	30
Istiklal Hospital	Tel: 00962-6-5652600 www.Istiklal.jo	114
Istishari Hospital	Tel: 00962-6-5001000 www.istisharihospital.com	118
Italian Hospital – Amman	Tel: +962-6-4777101 e-mail.: non	85
Jordan Hospital	Tel: 00962-6-5608080 www.jordan-hospital.com	300
King Hussein Cancer Center	Tel: 00962-6-5300460 www.khcc.jo	170
Luzmila Hospital	Tel: 00962-6-4624345 www.luzmila-hospital.com	48
Marka Islamic Specialty Hospital	Tel: 00962-6-4893855 e-mail.: none	38
Palestine Hospital	Tel: 00962-6-5607071 www.palestinehospital.org.jo	50
Specialty Hospital	Tel: 00962-6-5001111 http://www.specialty-hospital.com	180
Farah Hospital	Tel: 00962-6-4644440 e-mail.: non	150
Jabal Amman Hospital (Obstetrics & Gynecology)	Tel: 00962-6-4642362 e-mail.: non	40
Al-Amal Hospital (Obstetrics & Gynecology)	Tel: 00962-6-5607155 e-mail.: non	80
Ibn Al Haitham Hospital	Tel: 00962-6-5516808 e-mail.: non	200
Islamic Hospital	Tel: 00962-6-5680127 e-mail.: non	280
Red Crescent Hospital	Tel: 00962-6-4779131 e-mail.: non	20

Source: website: www.phajordan.org

(3-4): Data Collection Methods

The current study is based on two aspects fold, theoretical and practical. In the theoretical side, the researcher based on scientific studies that are related to the current study.

While in the practical side, descriptive and analytical method using practical way to collect and analyze data and test hypotheses performed. Two types of data collections methods used:

1. Secondary sources: books, journals, theses were used to understand the theoretical framework of the study, and develop its model and hypotheses.
2. Primary source: based on previous empirical studies and the research objectives, a questionnaire was specifically designed to collect primary data about all the research variables and the demographic characteristics of the research sample and hospitals.

The questionnaire consists of three parts, that are:

Section One: Demographic variables

The demographic information was collected with closed-ended questions, through (6) factors. (gender, age, educational level, job position, experience and number of beds).

Section Two: strategic agility dimensions

The strategic agility was operationalized through (5) dimensions (clarity of vision, core capabilities, selected strategic targets, shared responsibility, tacking action) which were identified based on relevant literature review (Oyedijo, 2012; Arteta et.al, 2004; Fartash, 2012). Five point Likert-type scale was used to measure the strategic agility dimensions which were measured by (20) items. Clarity of vision was measured by (4) questions from (1) to (4); understanding core capabilities was measured by (4) questions from (5) to (8); selection of strategic

targets was measured by (4) questions from (9) to (12); shared responsibility was measured by (4) questions from (13) to (16); and taking actions was measured by (4) questions from (17) to (20) (Appendix 3).

Section Three: Operations competitive capabilities dimensions

Operations competitive capabilities were operationalized through five dimensions (innovation; service quality; delivery reliability; flexibility and cost leadership) which are identify based on relevant literature review (Nassimbeni, 2003; Chen, 2004). Five point Likert-type scale was used to measure the operation competitive capabilities dimensions which were measured by (18) items: innovation was measured by (4) questions from (21) to (24); quality was measured by (5) questions from (25) to (29); delivery reliability was measured by (2) questions from (30) to (31); flexibility was measured by (4) questions from (32) to (35); and cost leadership was measured by (3) questions from (36) to (38).

Likert-type (5) scale implemented in the questionnaire as follows:

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

(3-5): Validity

Content validity is used to assess whether the instrument being used permits different dimensions of a phenomenon under study to be measured (Churchill, 1979). Content validity initially had been achieved via literature survey. The next step is to validate the content further by getting the preliminary instrument was been evaluated by practitioners and researchers for bias, ambiguity, and relevance to concept or the

phenomenon under study. As most of the scales in this study are previously developed scales, one can assume high degree of confidence in the content validity of the scale. For the newly develop items, the employment of the front-end development methodology (Menor and Roth, 2007) should ensure content validity.

To test the questionnaire for clarity and to provide a coherent research questionnaire, a macro review that covers all the research constructs was accurately performed by academic reviewers from Middle East and other universities specialized in Business Administration, Marketing, information system and education.

The questionnaire was submitted to (6) reviewers from the faculty members in Jordanian universities, to verify the sincerity of its paragraphs, and to take their opinions, and re-wording of some paragraphs, and make the required modifications, to carefully strike a weight degrees between the content of resolution in paragraphs.

(3-6): Exploratory Factor Analysis

To assess the EFA, four commonly used assumptions were followed (Hair et al., 1998; Field, 2000) : sampling adequacy (Kaiser-Meyer-Olkin measure > 0.5); the minimum eigen-value for each factor to be one; considering the sample size, factor loading of (0.40) for each item was considered as the threshold for retaining items to ensure greater confidence; and varimax rotation was used since it is a good general approach that simplifies the interpretations of factors (Field, 2000: 449).

Table (4) shows the result of EFA for strategic agility dimensions components. An index of Kaiser's, measure of sampling adequacy (overall MSA=0.872) and Bartlett's test of Sphericity ($p \leq 0.000$) suggested that factor analysis is appropriate for analyzing data. Based on

the eigen-value > 1 , the four factor model explains (60.82) percent of the total variance .

Table (4), also shows that results of EFA indicate that the (20) items of strategic agility loaded on four factors which slightly differ from Ojha (2008) study, in that the shared responsibility and taking action considered as one variable

Table (4)

Exploratory factor analysis results for Strategic Agility dimensions

Question NO.	Statement	Shared Responsibility And Taking Action	Selecting Strategic Targets	Understanding Core Capabilities	Clarity Of Vision
6	When allocating funds for process improvement, we are able to identify those processes that are most likely add value to our services from our clients' view point.	0.599			
13	We ask people on our project teams to treat mistakes as opportunities for learning and improvement rather than occasions for placing blame.	0.722			
14	We provide easy access to information of interest to our clients and the people we work with.	0.752			
15	We encourage people on our project teams, including the client, to behave as though each of us is responsible for the final results of the total project, rather than just for the part we have been assigned.	0.723			
16	We keep our clients fully involved in the planning and execution of projects by stressing the importance of their role in getting results.	0.571			
17	We make sure that people we work with are extremely or fully familiar with our strategy and its purpose.	0.674			
18	We are able to adapt our strategy to fit changing circumstances without losing sight of the strategy's overall purpose.	0.728			
19	We involve key people we work with in discussions of our strategies and solicit their thoughts on the best way to implement them.	0.671			
20	We frequently discuss with people we work with the kinds of actions needed to best carry out the business unit's strategy.	0.659			
5	We can describe the special skills, knowledge, and know-how that comprise our greatest strengths and that we rely on to maintain our competitive advantage.		0.571		
9	We are able to identify the market/client segments that place a high value on the service attributes we provide.		0.717		
10	We know which of our business unit's core capabilities are most important in creating value for existing or new market/client segments.		0.699		
12	We have in place the processes for identifying and developing services that provide a good match between our hospital's capabilities and market opportunities.		0.680		
3	We have a high level of agreement about the principles that should guide our behavior in conducting our business unit's operations.			0.594	
4	We are proud of what we are trying to achieve as a business unit.			0.821	
7	We have a good understanding of which skills and knowledge are most critical to providing services that are important to our clients.			0.453	
8	We are well aware of our business unit's reputation among our clients and what we are best known for in the marketplace.			0.559	
1	We have a clear sense of purpose and use it to guide our decisions in running the business.				0.703
2	We find it easy to explain our overall goals clearly and effectively to others.				0.701
Sampling adequacy (Kaiser-Meyer-Olkin measure >0.5)		0.872			
Eigen-value for each factor		7.790	2.023	1.349	1.003

Table (5)
Exploratory factor analysis results for Operations Competitive
Capabilities dimensions

Question NO.	Statement	Delivery Reliability and Process Flexibility	Service Quality	Innovation	Cost Leadership
30	Our business unit has the ability to reliably deliver services on time compared with our competitors.	0.686			
31	Our business unit has to promptly handle client complaints compared with our competitors.	0.763			
32	Our business unit has the ability to rapidly change service mix compared with our competitors.	0.657			
33	Our business unit has the ability to rapidly change service volumes compared with our competitors.	0.687			
34	Our business unit has the ability to provide broad service mix within same facilities compared with our competitors.	0.600			
35	Our business unit has the ability to rapidly handle clients' needs compared with our competitors.	0.660			
25	Our business unit has the ability to provide services of high level of quality compared with our competitors.		0.702		
26	Our business unit has the ability to provide services with high level of performance compared with our competitors.		0.784		
27	Our business unit has the high level of service quality as perceived by the client compared with our competitors.		0.680		
28	Our business unit has the ability to provide a high level of conformance quality compared with our competitors.		0.641		
29	Our business unit has the ability to provide a high level of service reliability compared with our competitors.		0.827		
21	Our business unit has the ability to develop new methods at a high rate compare with our competitors.			0.807	
22	Our business unit has the ability to develop new features in existing services at a high rate compared with our competitors.			0.794	
23	Our business unit has the ability to develop new service technology at a high rate compared with our competitors.			0.761	
24	Our business unit has the ability to develop new working methods at a high rate compared with our competitors.			0.721	
36	Our business unit has the ability to offer lower priced services compared with our competitors.				0.916
37	Our business unit has the ability to provide services at lower internal costs compared with our competitors.				0.924
38	Our business unit has the ability to reduce overhead costs compared with our competitors.				0.887
Sampling adequacy (Kaiser-Meyer-Olkin measure >0.5)		0.885			
Eigen-value for each factor		8.291	2.789	1.137	1.006

Table (5) shows the result of EFA for operations competitive capabilities dimensions components. An index of Kaiser's, measure of sampling adequacy (overall MSA=0.885) and Bartlett's test of Sphericity ($p \leq 0.000$) suggested that factor analysis is appropriate for analyzing

data. Based on the eigen-value > 1 , the four factor model explains 73.46 percent of the total variance. Table (5) also shows that results of EFA indicate that the 18 items of operations competitive capabilities loaded on four factors which slightly differ from Chen (2004) study, in that the delivery reliability and process flexibility in this study considered as one variable.

As the result of EFA, a modified research model represented into chapter five and according to this modified model, the six hypothesis drawn in chapter one will be reduced to five hypothesis, the null hypothesis H_{05} omitted.

(3-7): Reliability

A measure is reliable if measurement of the same phenomena at different times and places yields the same measurement. Cronbach's alpha based on work in the 1940s by Guttman and others is the most common estimate of internal consistency (reliability) of items in a scale. Internal consistency measures estimate how consistently individuals respond to the items within a scale. Alpha measures the extent to which item responses obtained at the same time correlate highly with each other. Cronbach's alpha was used to estimate the reliability in this study. The cut-off value of Cronbach's alpha used was ($\text{Alpha} \geq 0.60$) suggested by (Sekaran, 2003). The High level of Cronbach Alpha (α) is to Cost Leadership = (90.9). The lowest level of Cronbach Alpha (α) is to Understanding Core Capabilities = (72.0). These results are the acceptable levels as suggested by (Sekaran, 2003). The results were shown in Table (6).

To calculate the stability of an instrument study, the researcher used the equation of internal consistency using test Cronbach's alpha. Table (6) showed the test results where the values of Cronbach's alpha

for all variables of the study and identification of generally higher than (60%) which is acceptable in the research and studies, which gives the questionnaire as a whole the reliability, coefficient ranged between (72.0-90.9%), as shown in Table (6).

Table (6)
Cronbach's Alpha Comparison Between Current study and Ojha, 2008 Study

	Current Study	Ojha, 2008 Study
Variables	Cronbach's Alpha	Cronbach's Alpha
Clarity of Vision	79.8	90.6
Understanding Core Capabilities	72.0	89.8
Selecting strategic targets	74.9	90.1
Shared Responsibility and Taking Action	89.3	89.0
		89.9
Innovation	90.1	89.7
Service Quality	89.4	91.3
Delivery Reliability and Process Flexibility	88.4	78.4
		86.3
Cost Leadership	90.9	86.4

Also, table (6) show a comparison between Cronbach's Alpha values between the current study and Ojha (2008) study variables of which this study variables adopted on the basis of it, and it clarifies that there is a consensus between Cronbach's Alpha of the current study variables and Ojha (2008) variables and the slightly differences may be referred to the environment applied to this study, as the current study

applied in hospitals, while Ojha (2008) study applied in manufacturing companies.

(3-8): Statistical Treatment

Statistical Package for Social Sciences (SPSS.18) was used to analyze the collected data and test the research hypotheses.

The statistical methods used in this research consist of the following:

1. Descriptive statistics that include percentages, frequencies, means, and standard deviation to describe all the research variables and questions to achieve the first and second research objectives, and to examine the level of commitment and satisfaction of the research variables class interval assign to:

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

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

The Low degree from 1- less than 2.33

The Medium degree from 2.33 – 3.66

The High degree from 3.67 and above.

2. Structural equation model was performed to assess the model goodness-of-fit.
3. Cronbach's Alpha was used to examine the reliability of each variable on the model by which the strength of correlation and coherence between the items of each variables was tested.

4. Exploratory factor loading (EFA) was performed in order to assess study construct validity, to test the strategic agility and operations competitive capabilities dimensions and also to test the degree to which the items are tapping the same concept.
5. Structural path analyses was also used to test the research hypotheses concerning the relationship between strategic agility dimensions and operations competitive capabilities.
6. Analysis of variance (ANOVA) was also used to analyze the differences between group means and their associated procedure in order to test null hypothesis H_{06} .

CHAPTER FOUR

Testing Hypotheses

(4-1): Introduction

According to the purpose of the study and the study framework presented in the previous chapter, this chapter describes the results of the statistical analysis of the data collection for the study questions and research hypotheses. To describe the characteristics of the sample depending on the frequencies, percentages, and in order to answer the questions of the study, means and standard deviations, as well as the Cronbach's Alpha Test were used to ensure the reliability of the study tool. In order to test the study hypotheses structural path analysis , and One Way ANOVA were performed .

(4-2): Research Sample Characteristics

Table (7) shows the research sample characteristics (gender, age, educational level, job position, experience, number of beds).

Table (7)
Research Sample Characteristics

			No.	Ratio %
1	Gender	Male	92	62.6
		Female	55	37.4
Total			147	100%
2	Age	Less than 30 Years	25	17.0
		30 and less than 45 years	68	46.3
		Greater than 45 years	54	36.7
Total			147	100%
3	Educational Level	Bachelor	105	71.4
		Graduate	42	28.6
Total			147	100%
4	Position	General Manager	18	12.2
		Vice President	8	5.4
		Unit Manager	48	32.7
		Head Department	73	49.7
Total			147	100%
5	Experience	Less than 5 years	12	8.2
		5 less than 10 years	24	16.3
		10 less than 15 years	47	32.0
		Greater than 15 years	64	43.5
Total			147	100%
6	Number of beds	Less than 75 beds	47	32.0
		76 – 100 beds	18	12.2
		101- 125 beds	26	17.7
		Greater than 125 beds	56	38.1
Total			147	100%

Source: Prepared by Researcher

Table (7) explore the results of descriptive analysis of demographic variables of respondent members of the study sample. The table shows that (62.6 %) of the study sample is male and (37.4 %) is female. On the other side the (83%) of the sample ranged above (30) years. From the experience point view, (75.5%) of respondents have more than (10)years experience in health care sector which gives an indication of their role in keeping pace with rapid development in health care sector, and experience result were consistent with the age result. Table (7) show also that respondent come from various positions which mean that sample was relatively representative. On the other hand (68%)of the Jordanian Private Hospitals in Amman are of more than (75) of beds which provide an indication of the rapid growth in the hospital sector which make Jordan considered as medical destination for peoples from other countries, and respondent come from various hospitals according to number of beds which also mean that sample was relatively representative.

(4-3): Descriptive Analysis of Study Variables

Strategic Agility

1. Clarity of Vision:

Table (8)

Clarity of Vision: means and standard deviation

No	Statements	Mean	Std. Deviation	Degree	Rank
1	We have a clear sense of purpose and use it to guide our decisions in running the business.	4.20	0.68	High	1
2	We find it easy to explain our overall goals clearly and effectively to others.	4.02	0.77	High	2
	Total	4.11	0.73	High	

Table (8) Clarifies the importance level of clarity of vision, where total mean amount of (4.11). Such results show how Jordanian Private Hospitals communicate vision among employees clearly. However, the results also show how clarity of vision is partially guiding the business unit's operation.

In general, This explains that the perspective of the managers and heads of departments was in the high level about the clarity of vision in the Jordanian Private Hospitals in Amman.

This explain that the perspective of the managers and heads of departments was in the high level about the clarity of vision in the Private Hospitals in Amman

2. Understanding Core Capabilities:

Table (9)

Understanding Core Capabilities: means and standard deviation

No	Statements	Mean	Std. Deviation	Degree	Rank
3	We have a high level of agreement about the principles that should guide our behavior in conducting our business unit's operations.	3.90	0.77	High	4
4	We are proud of what we are trying to achieve as a business unit.	4.12	0.80	High	2
7	We have a good understanding of which skills and knowledge are most critical to providing services that are important to our clients.	4.16	0.78	High	1
8	We are well aware of our business unit's reputation among our clients and what we are best known for in the marketplace	4.04	0.75	High	3
Total		4.05	0.77	High	

Table (9) clarifies the importance level of understanding core capabilities, where the means range between (3.90-4.16) compared with total mean amount of (4.05). We observe that the highest mean for Item “We have a good understanding of which skills and knowledge are most critical to providing services that are important to our clients” with mean (4.16), standard deviation (0.78) ,such results show that Jordanian Private Hospitals manage their skills and knowledge in proper way to provide good services for clients.

In general, This explains that the perspective of the managers and heads of departments was in the high level about the understanding core capabilities in the Jordanian Private Hospitals in Amman.

This explain that the perspective of the managers and heads of departments was in the high level about the core capabilities in the Private Hospitals in Amman

Selecting Strategic Targets:

Table (10)

Selecting Strategic Targets: means and standard deviation

No	Statements	Mean	Std. Deviation	Degree	Rank
9	We are able to identify the market/client segments that place a high value on the service attributes we provide.	3.91	0.78	High	2
10	We know which of our business unit's core capabilities are most important in creating value for existing or new market/ client segments.	3.90	0.84	High	3
5	We can describe the special skills, knowledge, and know-how that comprise our greatest strengths and that we rely on to maintain our competitive advantage.	4.13	0.73	High	1
12	We have in place the processes for identifying and developing services that provide a good match between our hospital's capabilities and market opportunities.	3.90	0.80	High	3
	Total	3.96	0.0.79	High	

Table (10) clarifies the importance level of selecting strategic targets, where the means range between (3.90-4.13) compared with total mean amount of (3.96). We observe that there are no obvious differences between mean for the four items.

In general, this explains that the perspective of the managers and heads of departments was in the high level about the selecting strategic target in the Jordanian Private Hospitals in Amman.

This explain that the perspective of the managers and heads of departments was in the high level about the selecting strategic targets in the Private Hospitals in Amman

3. Shared Responsibility and Taking Action:

Table (11)

Shared Responsibility and Taking Action: means and standard deviation

No	Statements	Mean	Std. Deviation	Degree	Rank
13	We ask people on our project teams to treat mistakes as opportunities for learning and improvement rather than occasions for placing blame.	4.21	0.79	High	1
14	We provide easy access to information of interest to our clients and the people we work with.	3.91	0.80	High	4
15	We encourage people on our project teams, including the client, to behave as though each of us is responsible for the final results of the total project, rather than just for the part we have been assigned.	3.84	0.91	High	6
16	We keep our clients fully involved in the planning and execution of projects by stressing the importance of their role in getting results.	3.71	0.91	High	8
17	We make sure that people we work with are extremely or fully familiar with our strategy and its purpose.	3.97	0.87	High	2
18	We are able to adapt our strategy to fit changing circumstances without losing sight of the strategy's overall purpose.	3.94	0.82	High	3
19	We involve key people we work with in discussions of our strategies and solicit their thoughts on the best way to implement them.	3.85	0.79	High	5
20	We frequently discuss with people we work with the kinds of actions needed to best carry out the business unit's strategy.	3.82	0.82	High	7
	Total	3.90	0.95	High	

Table (11) clarifies the importance level of shared responsibility and taking action, where the means range between (3.71-4.21) compared with total mean amount of (3.90). We observe that the highest mean for Item “We ask people on our project teams to treat mistakes as opportunities for learning and improvement rather than occasions for placing blame” with mean (4.21), standard deviation (0.79) which indicate that the Jordanian Private Hospitals working on spreading the blame free culture between among their employees. While the lowest mean was for item. “We keep our clients fully involved in the planning and execution of projects by stressing the importance of their role in getting results”, with mean (3.71) and standard deviation (0.91), such results show that Jordanian private hospitals still need more to consider their clients as partners rather than consumers.

In general, this explains that the perspective of the managers and heads of departments was in the high level about the shared responsibility in the Jordanian Private Hospitals in Amman.

This explain that the perspective of the managers and heads of departments was in the high level about the shared responsibility and taking action in the Private Hospitals in Amman

(4-4): Operations Competitive Capabilities

1. Innovation:

Table (12)

Innovation: means and standard deviation

No	Statements	Mean	Std. Deviation	Degree	Rank
21	Our business unit has the ability to develop new methods at a high rate compare with our competitors.	3.90	0.92	High	1
22	Our business unit has the ability to develop new feature in existing services at a high rate compared with our competitors.	3.79	0.91	High	3
23	Our business unit has the ability to develop new service technology at a high rate compared with our competitors.	3.83	0.83	High	2
24	Our business unit has the ability to develop new working methods at a high rate compared with our competitors.	3.72	0.83	High	4
	Total	3.81	0.87	High	

Table (12) clarifies the importance level of innovation, where the means range between (3.72-3.90) compared with total mean amount of (3.81). We observe that the highest mean for Item “Our business unit has the ability to develop new methods at a high rate compare with our competitors” with mean (3.90), standard deviation (0.92) which indicate that the Jordanian Private Hospitals keep pace with technological development and the high competition environment in the health care sector. While the lowest mean was for item “Our business unit has the

ability to develop new working methods at a high rate compared with our competitors” with mean (3.72) and standard deviation (0.83).

In general, this explains that the perspective of the managers and heads of departments was in the high level about the innovation in the Jordanian Private Hospitals in Amman.

This explain that the perspective of the managers and heads of departments was in the high level about the innovation in the Private Hospitals in Amman

2. Service Quality:

Table (13)

Service Quality: means and standard deviation

No	Statements	Mean	Std. Deviation	Degree	Rank
25	Our business unit has the ability to provide service of high level of quality compared with our competitors.	4.05	0.75	High	1
26	Our business unit has the ability to provide services with high level of performance compared with our competitors.	3.91	0.83	High	4
27	Our business unit has the high level of service quality as perceived by the client compared with our competitors.	3.88	0.85	High	5
28	Our business unit has the ability to provide a high level of conformance quality compared with our competitors.	4.00	0.82	High	3
29	Our business unit has the ability to provide a high level of service reliability compared with our competitors.	4.00	0.73	High	2
	Total	3.97	0.80	High	

Table (13) clarifies the importance level of service quality, where the means range between (3.88-4.05), compared with general mean amount of (3.97). We observe that the highest mean for item “Our business unit has the ability to provide service of high level of quality compared with our competitors” with mean (4.05), standard deviation (0.75) which indicate that the awareness of Jordanian private hospitals of the role played by the quality of services provided to clients in their survival. While the lowest mean was for item “Our business unit has the high level of service quality as perceived by the client compared with our competitors”.

In general, this explains that the perspective of the managers and heads of departments was in high level about the service quality in the Jordanian Private Hospitals in Amman.

This explains that the perspective of the managers and heads of departments was in the high level about the service quality in the Private Hospitals in Amman

3. Delivery Reliability and Process flexibility:

Table (14)

Delivery Reliability and Process Flexibility: means and standard deviation

No	Statements	Mean	Std. Deviation	Degree	Rank
30	Our business unit has the ability to reliably deliver services on time compared with our competitors.	3.89	0.71	High	1
31	Our business unit has to promptly handle client complaints compared with our competitors.	3.84	0.78	High	3
32	Our business unit has the ability to rapidly change service mix compared with our competitors.	3.70	0.81	High	5
33	Our business unit has the ability to rapidly change services volume compared with our competitors.	3.64	0.83	High	6
34	Our business unit has the ability to provide broad service mix within same facilities compared with our Competitors.	3.74	0.89	High	4
35	Our business unit has the ability to rapidly handle clients' needs compared with our competitors.	3.88	0.90	High	2
	Total	3.78	0.82	High	

Table (14) clarifies the importance level of delivery reliability and process flexibility, where the general mean amount of (3.78), standard deviation (0.82), which indicates the constant concern of Jordanian private hospitals to provide high quality of services to increase the proportion of satisfied clients.

In general, this explains that the perspective of the managers and heads of departments was in the high level about the service reliability in the Jordanian Private Hospitals in Amman.

This explains that the perspective of the managers and heads of departments was in the high level about the delivery reliability and process flexibility in the Private Hospitals in Amman

4. Cost Leadership:

Table (15)

Cost Leadership: means and standard deviation

No	Statements	Mean	Std. Deviation	Degree	Rank
36	Our business unit has the ability to offer lower priced services compared with our competitors.	3.65	1.00	High	3
37	Our business unit has the ability to provide services at lower internal costs compared with our competitors.	3.77	0.93	High	1
38	Our business unit has the ability to reduce overhead costs compared with our competitors.	3.67	0.95	High	2
	Total	3.70	0.96	High	

Table (15) clarifies the importance level of cost leadership where the general mean amount of (3.7), standard deviation (0.96), which indicates that Jordanian Private Hospitals pursuit to costs and decrease prices in order to maintain its position among competitors.

In general, this explains that the perspective of managers and heads of departments was in high level about the cost leadership in the private Jordanian Private Hospitals in Amman.

This explains that the perspective of the managers and heads of departments was in the high level about the cost leadership in the Private Hospitals in Amman

(4-5): Testing Multiple Regression Analysis Assumption

Before starting the application of regression analysis, some assumption should be met in order to ensure the appropriateness of the data for regression analysis, as follows:

In order to make sure that there is no multicollinearity between variables, variance inflation factor (VIF), tolerance test conducted, in which VIF - usually used to measure how the multicollinearity can inflate the variance of regression coefficient - not exceed a value of (10), and tolerance test value greater than (0.05). Also Skewness test conducted in order to test that the data follow normal distribution, in which Skewness value is less than (1.0).

(4-5-1): Multicollinearity

Table (16)

Variance Inflation Factor, Tolerance and Skewness tests

Strategic Agility	Tolerance	VIF	Skewness
Clarity of Vision	0.545	1.834	-.167
Core Capabilities	0.596	1.677	-.608
Selected Strategic Targets	0.542	1.845	-.268
Shared Responsibility and Taking Action	0.618	1.617	-.690

Table (16) shows that the VIF values for the independent variables included in multiple regression equation are less than the cut – off point(10), tolerance test for the independent variables are greater than the cut- off point (0.05) and Skewness test values are less than (1.0), therefore, the correlation between the independent variables is not a problem for conducting multiple regression analyses.

(4-5-2): Dependability of Dependent Variable:

Table (17)

Pearson's Correlation research variables matrix

	Shared Responsibility and Taking Action	Strategic Targets	Core Capabilities	Clarity of Vision	Delivery Reliability and Process Flexibility	Services Quality	Innovation	Cost Leadership
Shared Responsibility and Taking Action	1.000							
Strategic Targets	0.569	1.000						
Core Capabilities	0.427	0.532	1.000					
Clarity of Vision	0.511	0.556	0.581	1.000				
Delivery Reliability and Process Flexibility	0.673	0.611	0.411	0.465	1.000			
Services Quality	0.602	0.612	0.452	0.496	0.675	1.000		
Innovation	0.666	0.557	0.288	0.376	0.678	0.676	1.000	
Cost Leadership	0.220	0.227	0.091	0.070	0.301	0.004	0.084	1.000

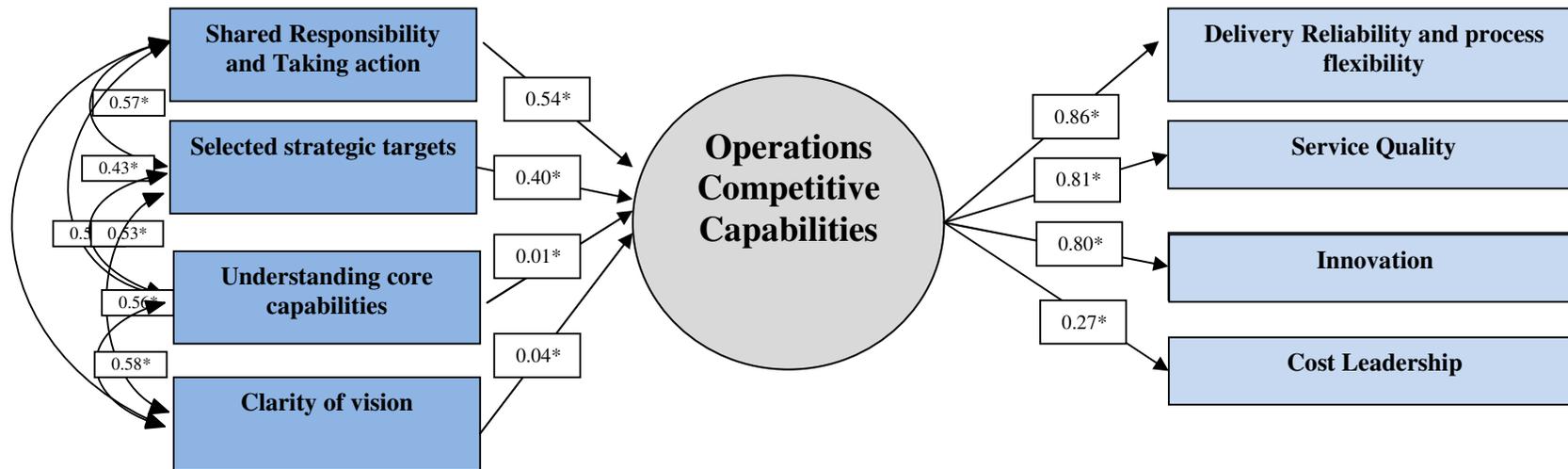
Correlation is significant at the ($\alpha \leq 0.05$) level (2-tailed)

Pearson correlation coefficient has been used to find the Multi-Collinearity between the independent variables. Table (18) shows the results.

(4-5-3): Structural model equation

Structural equation model is important to examine the fit of an proposed study model before start testing study hypothesis . Structural equation model determine how proposed study model modeling the data. It is also used to assess the study model for good fitness . The goodness of measurement model fit using structural equation model were followed (Chau, 1997, p 318): goodness of fit index ($GFI \geq 0.9$); adjusted goodness-of-fit index ($AGFI \geq 0.8$); normal fit index ($NFI \geq 0.9$); non-normal fit index ($NNFI \geq 0.9$); comparative fit index ($CFI \geq 0.9$); and root mean error of approximation ($RMSEA < 0.1$).

Before starting test hypotheses, structural equation model was performed to assess good-of-fitness of study model.



Model goodness of fit		
GFI	0.960	≥ 0.90
AGFI	0.881	≥ 0.80
NFI	0.939	≥ 0.90
CFI	0.974	≥ 0.90
SRMR	0.039	≤ 0.08
RMSEA	0.093	≤ 0.10

Figure (4): Structural equation model for strategic agility factors operations competitive capabilities

Based on the data results from exploratory factor analysis, study model proposed in chapter one was modified and according to the result of structural equation model shown in figure (4), the modified model provide fit to the data ; CFI = 0.974; GFI = 0.960; RMSEA = 0.093.

Also figure (4) showed according to β values for operations competitive capabilities , that operations competitive capabilities change per 0.80 change in innovation, operations competitive capabilities change per 0.81 change in service quality and operations competitive capabilities change per 0.86 change in delivery reliability and process flexibility. On the other side the cost leadership change as $\beta=0.27$ does not make significant change in operations competitive capabilities.

Ho1: There is no significant impact of Clarity of vision on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).

To test this hypothesis structural equation model was used and the results showed in table (18)

Table (18)

Structural path models results: Clarity of vision impact on operations competitive capabilities

Dependent variable in the regression path is operations competitive capabilities			
R^2 0.738			
Independent variable	β	t-value	Sig.T
Clarity of vision	0.04	0.537	0.609

*The impact is significant at level ($\alpha \leq 0.05$)

From table (18) we observe that there is no significant impact of clarity of vision on operations competitive capabilities in Jordanian Private Hospitals. The (β) was (0.04) at level ($\alpha \leq 0.05$). In other words,

any change in the clarity of vision will not lead to significant change in operations competitive capabilities within the same direction. As T calculated was (0.537) and its significance level was (0.860) at level ($\alpha \leq 0.05$), we accept the null hypothesis H_{01} :

There is no significant impact of core capabilities on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).

H_{02} : There is no significant impact of core capabilities on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).

To test this hypothesis structural equation model was used and the results showed in Table (19) .

Table (19)

Structural path models results: Core capabilities impact on operations competitive capabilities

Dependent variable in the regression path is operations competitive capabilities			
	R^2	0.738	
Independent variable	β	t-value	Sig.T
Core capabilities	0.01	0.139	0.860

*The impact is significant at level ($\alpha \leq 0.05$)

From table (19) we observe that there is no significant impact of core capabilities on operations competitive capabilities in Jordanian Private Hospitals. The (β) was (0.01) at level ($\alpha \leq 0.05$). In other words, any change in the core capabilities will not lead to significant change in operations competitive capabilities within the same direction. As T value was (0.139) and its significance level was (0.860) at level ($\alpha \leq 0.05$), we accept the null hypothesis H_{02} :

There is no significant impact of core capabilities on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).

H_{03} : There is no significant impact of selected strategic targets on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).

To test this hypothesis structural equation model was used and the results showed in Table (20) .

Table (20)

Structural path models results: Selected strategic targets impact on operations competitive capabilities

Dependent variable in the regression path is operations competitive capabilities			
	R^2 0.738		
Independent variable	β	t-value	Sig.T
Selected strategic targets	0.40	5.325	0.000

*The impact is significant at level ($\alpha \leq 0.05$)

From table (20) we observe that there is significant impact of selected strategic targets on operations competitive capabilities in Jordanian Private Hospitals. The (β) was (0.40) at level $(\alpha \leq 0.05)$. In other words, any change in the core capabilities will lead to significant change in operations competitive capabilities within the same direction. As T value was (5.325) and its significance level was (0.000) at level $(\alpha \leq 0.05)$, we reject the null hypothesis H_{03} and the alternative hypothesis accepted:

There is significant impact of selected strategic targets on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level $(\alpha \leq 0.05)$.

H_{04} : There is no significant impact of shared responsibility and taking action on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level $(\alpha \leq 0.05)$.

To test this hypothesis structural equation model was used and the results showed in Table (21) .

Table (21)

Structural path models results: Shared responsibility and taking action impact on operations competitive capabilities

		Dependent variable in the regression path is operations competitive capabilities		
		R^2		
Independent variable		β	t-value	Sig.T
Shared responsibility and taking action		0.54	7.307	0.000

*The impact is significant at level $(\alpha \leq 0.05)$

From table (21) we observe that there is significant impact of shared responsibility and taking action on operations competitive capabilities in Jordanian Private Hospitals. The (β) was (0.54) at level $(\alpha \leq 0.05)$. In other words, any change in the core capabilities will lead to significant change in operations competitive capabilities within the same direction. As T value was (7.307) and its significance level was (0.000) at level $(\alpha \leq 0.05)$, we reject the null hypothesis H_{04} and the alternative hypothesis accepted:

There is significant impact of shared responsibility and taking action on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level $(\alpha \leq 0.05)$.

H_{05} : There is no significant differences between hospitals according to the hospitals' size in strategic agility (clarity of vision, core capabilities, selected strategic targets, shared responsibility and taking action) impact on operations competitive capabilities at level $(\alpha \leq 0.05)$.

To test this hypothesis the researcher uses the One Way ANOVA to identify the effect of strategic agility on operation competitive capabilities within the Hospitals' size of Jordanian Private Hospitals in Amman and the table (22) show that.

Table (22)
One Way ANOVA to Identify the effect of strategic agility on
Operation Competitive Capabilities within the Hospitals' Size of
Jordanian Private Hospitals in Amman

	Sum of Squares	DF	Mean Square	F	Sig*
Between Groups	2.805	3	0.935	4.110	0.008
Within Groups	32.529	143	0.227		
Total	35.334	146			

*The impact is significant at level ($\alpha \leq 0.05$)

Table (22) clarify that there are significant differences between the members of the study sample from point view of the size of the hospital, with respect to effect of strategic agility on operation competitive capabilities, as (F) value was (4.110) and its significance level was (0.008) at level ($\alpha \leq 0.05$) to know any category of size hospitals were differences in their favor, Scheffe Test were conducted to determine which category of hospitals size differ, table (23) illustrates this.

Table (23)
Multiple Comparison Scheffe Test

(I) BEDS	(J) BEDS	Mean Difference (I-J)	Sig*
Less than 75 beds	76-100 beds	0.1252	.826
	101-125 beds	0.1784	.507
	Greater than 125 beds	0.3286	.009
76-100 beds	Less than 75 beds	0.1252	.826
	101-125 beds	0.0531	.988
	Greater than 125 beds	0.2034	.482
101-125 beds	Less than 75 beds	0.1784	.507
	76-100 beds	0.531	.988
	Greater than 125 beds	0.1502	.624
Great than 125 beds	Less than 75 beds	0.3286	.009
	76-100 beds	0.2034	.482
	101-125 beds	0.1502	.624

*The impact is significant at level ($\alpha \leq 0.05$)

Table (23) clarify that the differences were in favor of category of (a class of great than 125 beds), this explain the most effect of strategic agility on operation competitive capabilities in a class of more than (125) beds, its significance value was (0.009) at level ($\alpha \leq 0.05$) , consequently the null hypothesis H_{02} rejected and the alternative hypothesis accepted:

There is significant differences between hospitals according to the hospitals' size in strategic agility (clarity of vision, core capabilities, selected strategic targets, shared responsibility, taking action) impact on Operation Competitive Capabilities at level ($\alpha \leq 0.05$)

CHAPTER FIVE

Results, Conclusions and Recommendations

(5-1): Results

This study aims to answer the questions in chapter one, testing the hypothesis and their relations to the impact within the study variables.

The study arrived to many results, contributed to solve the study problem, answering the questions and hypothesis of the study, the main results are:

1. The importance level of clarity of vision in Jordanian Private Hospitals was high (4.11).
2. The importance level of core capabilities in Jordanian Private Hospitals was high (4.05), which corresponds with (O'Regan and Ghobadian, 2004) findings that is organizational capabilities is an integral part of the strategic process and are the basis of strategic directions.
3. The importance level of selecting strategic target in Jordanian Private Hospitals was high (3.96).
4. The importance level of shared responsibility and taking action in Jordanian Private Hospitals was high (3.90) which indicate that Jordanian Private Hospitals support McGaughey (1999), in that for agility they should encourage creativity, the free flow of information and exchange of ideas, cooperation collaborative intra- and inter organizational work, individual initiative and personal responsibility.
5. The importance level of innovation in Jordanian Private Hospitals was high (3.81).
6. The importance level of service quality in Jordanian Private Hospitals was high (3.97).

7. The importance level of delivery reliability and process flexibility in Jordanian Private Hospitals was high (3.78).
8. The importance level of cost leadership in Jordanian Private Hospitals was high (3.70).
9. There is significant impact of some of strategic agility dimensions on operations competitive capability in Jordanian Private Hospitals at level ($\alpha \leq 0.05$), that support results of (Oyedijo, 2012) which state that strategic agility actually influences the competitive performance of telecommunication firms in Nigeria and corresponds with(Ojha, 2008) results in that strategic agility enhances an organization's competitive capabilities.
10. There is no significant impact of clarity of vision on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).
11. There is no significant impact of core capabilities on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).
12. There is significant impact of selected strategic targets on operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).
13. There is significant impact of shared responsibility and taking action operations competitive capabilities (innovation; quality; delivery reliability; flexibility and cost leadership) in Jordanian Private Hospitals at level ($\alpha \leq 0.05$).

Results from point (10) to point (13) support (Zelbst, 2010) results that agility manufacturing strategy directly affect both operational and logistic performance, and that relative low cost, relative with quality and rapid response to changes in customer demand combine as strategic imperatives to sustainable competitive advantage.

14. There is a significant difference between hospitals according to the hospital size in strategic agility impact on operation competitive capabilities at level ($\alpha \leq 0.05$).

15. Based on the empirical findings of this study, figure (5) shows the modified research model. The figure shows that the dimensions of strategic agility are four dimensions and the dimensions of operations competitive capabilities are also for and these findings were the results of exploratory factor analysis.

Independent Variables

Dependent Variables

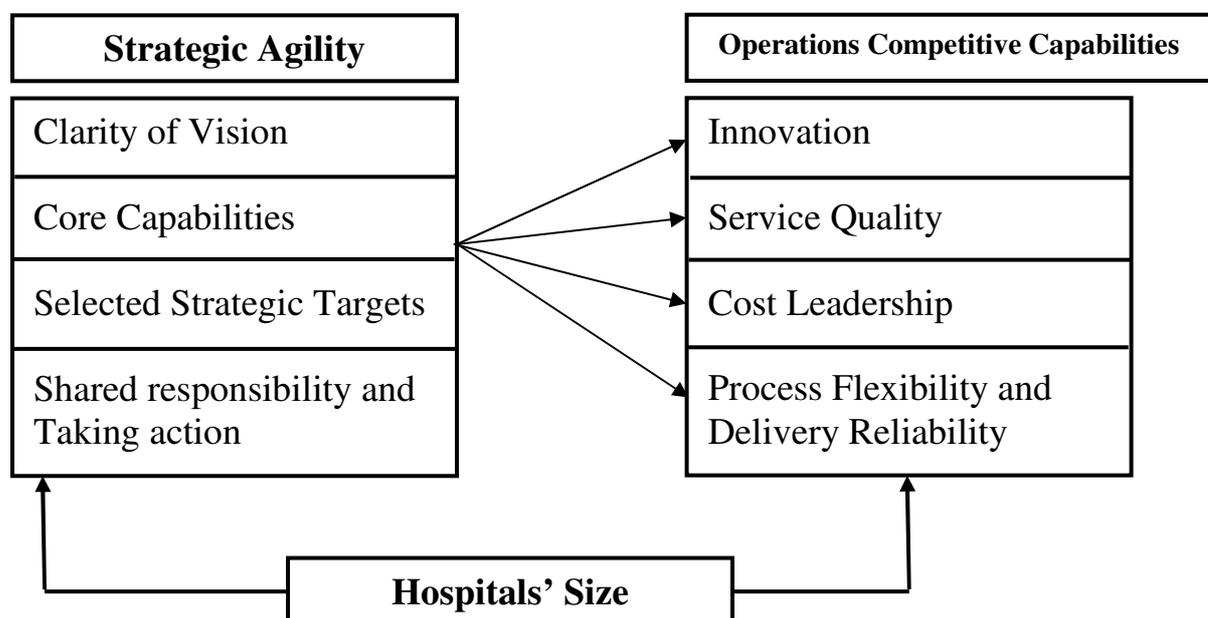


Figure (5): Modified Study Model

Source: Prepared by Researcher

(5-2): Conclusions

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

1. Jordanian Private Hospitals aware of strategic agility dimensions especially in the light of high levels of competitive and turbulent environment, and that proves that Jordanian Private Hospitals are following strategic agility as Goldman and Nagal (1993) defined the concept of agility as being capable of operating profitability in a competitive environment of continuously and unpredictably, changing customer opportunities.
2. Some strategic agility dimensions has an impact on the operations competitive capabilities in Jordanian Private Hospitals, which aligned with Ren, Yusuf, and Burns (2000; 2005) suggestion that agile organization deliver better on cost, quality, speed, flexibility and innovation simultaneously without compromising on any of these criteria and support Oyedijo (2012) results that showed significant relationship between strategic agility and competitive performance.
3. Strategic agility dimensions (clarity of vision and core capabilities) have no significant impacts on operations competitive capabilities (innovation, service quality, delivery reliability and process flexibility and cost leadership).
4. Jordanian Private Hospitals able to create value and use it in selecting their clients.
5. Jordanian Private Hospitals able to use its value chain partners capabilities strategically, and that proves and support what Fartash and Davoudi (2012) found that agility has greater value in conditions of environmental change as it enables firms to achieve a fit between supply side capabilities and the demand of the market.

6. Jordanian Private Hospitals aware of the role played by their stakeholders and their contribution in decision making.
7. Jordanian Private Hospitals faced difficulties in alignment between strategic agility and their ability to provide services at competitive price.
8. Jordanian private hospitals maintain their operations competitive capabilities through good service quality, good response, shared responsibility, and according to that it can no able to follow cost leadership strategy.
9. According to the hospital size there is significant different in strategic agility impact on the operation competitive capabilities.

(5-3): Recommendations

On the basis of study results and conclusions, the following recommendations are suggested:

1. Jordanian Private Hospitals recommended to translate their vision into policies and procedures in order to enhance their impact on their operation competitive capabilities, and there should be a clear and shared understanding of the hospital strategic vision. One of the best approaches recommended is effect internal communication through internal marketing in the hospital.
2. Jordanian Private Hospitals recommended to enhance their core capabilities (special skills and knowledge) and how to leverage them to maintain their competitive advantage and to create value of their customers.
3. Small Jordanian Private Hospitals have to raise their strategic agility in order to increase their operation competitive capabilities.

4. Further studies recommended to be conducted in health care sector in Jordan to increase health care capabilities especially, Jordan considered as a medical destination for the Middle East region and Arab World.
5. Further studies also recommended to be conducted from the perspective of medical and administrative point of view, hospital experience in term of hospital life, services provided, human resources and their skills.

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Appendix (1)

Questionnaire before reviewing

المحترم

حضرة الأستاذ الدكتور

، ، ، تحية طيبة وبعد ، ، ،

نظراً لما تتمتعون به من خبرة وسمعة أكاديمية مرموقة فقد تم اختياركم لتحكيم استبيان

دراسة بعنوان:

Strategic Agility and Its Impact on the Operation Competitive Capabilities in Jordanian Private Hospitals

لأغراض الحصول على درجة الماجستير في إدارة الأعمال.

راجياً تأثير ملاحظتكم حولها.

شاكراً لكم تعاونكم ، ، ،

الطالب: سامر سمير خليل أبو راضي

ت: 0795511019

المشرف: د. كامل الحواجرة

الجامعة: الشرق الأوسط

Demographic variables

Gender: Male Female

Age: less than 30 years
 30 and less than 45 years
 Great than 45 years

Educational Level: Bachelor Graduate

Job Position: General Manager Vice President
 Unit Manger Head Department

Experience: less than 5 years 5 less than 10 years
 10 less than 15 years great than 15 years

Number of beds: less than 75 beds 76-100 beds
 101-125 beds Great than 125 beds

No	Statements	The clarity of paragraph		The extent of the appropriate paragraph to measure what they may be put		The extent to which paragraph axle affiliation which contained in		Appropriate amendment
		Clear	Non Clear	Reconciliation	Inappropriate	Bice	Non Affiliate	
STRATEGIC AGILITY								
The clarity of vision in your business unit (1-4)								
1.	We have a clear sense of purpose and use it to guide our decisions in running the business.							
2.	We find it easy to explain our overall goals and their clearly and effectively to others.							
3.	We have a high level of agreement about the principles that should guide our behavior in conducting our business unit's operations.							
4.	We are proud of what we are trying to achieve as a business unit.							
Understanding of core capabilities in your business unit (5-8)								
5.	We can describe the special skills, knowledge, and know-how that comprise our greatest strengths and that we rely on to maintain our competitive advantage.							
6.	When allocating funds for process improvement, we are able to identify those processes that are most likely to add value to our products in the eyes of our clients.							

No	Statements	The clarity of paragraph		The extent of the appropriate paragraph to measure what they may be put		The extent to which paragraph axle affiliation which contained in		Appropriate amendment
		Clear	Non Clear	Reconciliation	Inappropriate	Bice	Non Affiliate	
7.	We have a good understanding of which skills and knowledge are most critical to providing results that are important to our clients.							
8.	We are well aware of our business unit's reputation among our clients and what we are best known for in the marketplace.							
The selection of strategic targets in your business unit (9-12)								
9.	We are able to identify the market/client segments that place a high value on the product attributes we provide.							
10.	We know which of our business unit's core capabilities are most important in creating value for existing or new market/client segments.							
11.	We know which competencies and processes we need to enhance or develop to better serve our targeted client segments.							
12.	We have in place the processes for identifying and developing products that provide a good match-up between our firm's capabilities and market opportunities.							

No	Statements	The clarity of paragraph		The extent of the appropriate paragraph to measure what they may be put		The extent to which paragraph axle affiliation which contained in		Appropriate amendment
		Clear	Non Clear	Reconciliation	Inappropriate	Bice	Non Affiliate	
The sharing of responsibility in your business unit (13-16)								
13.	We ask people on our project teams to treat mistakes as opportunities for learning and improving rather than as occasions for placing blame.							
14.	We provide easy access to information of interest to our clients and to the people we work with.							
15.	We encourage people on our project teams, including the client and his or her staff, to behave as though each of us is responsible for the final results of the total project, rather than just for the part we have been assigned.							
16.	We keep our clients fully involved in the planning and execution of projects and stress the importance of their role in getting results.							
The action orientation of your business unit (17-20)								
Action orientation: Reflects the degree to which the business unit can take informed on the spot action to take advantage of opportunities as they present themselves								
17.	We make sure the people we work with are familiar with our strategy and its purpose.							
18.	We are able to adapt our strategy to fit changing circumstances without losing sight of the strategy's overall purpose.							

No	Statements	The clarity of paragraph		The extent of the appropriate paragraph to measure what they may be put		The extent to which paragraph axle affiliation which contained in		Appropriate amendment
		Clear	Non Clear	Reconciliation	Inappropriate	Bice	Non Affiliate	
19.	We involve the key people we work with in discussions of our strategies and solicit their thoughts on the best way to implement them.							
20.	We frequently discuss with the people we work with the kinds of actions needed to best carry out the business unit's strategy.							
OPERATIONAL COMPETITIVE CAPABILITY								
How does your business unit compare with your competitors on the below mentioned capabilities related to innovation (Items: 22-24)?								
21.	How does your business unit's ability to develop new materials at a high rate compare with your competitors?							
22.	How does your business unit's ability to develop new features in your existing products at a high rate compare with your competitors?							
23.	How does your business unit's ability to develop new production technology at a high rate compare with your competitors?							
24.	How does your business unit's ability to develop new working methods at a high rate compare with your competitors?							

No	Statements	The clarity of paragraph		The extent of the appropriate paragraph to measure what they may be put		The extent to which paragraph axle affiliation which contained in		Appropriate amendment
		Clear	Non Clear	Reconciliation	Inappropriate	Bice	Non Affiliate	
How does your business unit compare with your competitors on the below mentioned capabilities related to product quality (Items: 25-29)?								
25.	How does your business unit's ability to manufacture products of high level of durability compare with your competitors?							
26.	How does your business unit's ability to provide products with high level of performance compare with your competitors?							
27.	How does your overall product quality as perceived by the customer compare with your competitors?							
28.	How does your business unit's ability to provide a high level of conformance quality compare with your competitors?							
29.	How does your business unit's ability to provide a high level of product reliability compare with your competitors?							
How does your business unit compare with your competitors on the below mentioned capabilities related to delivery reliability (Items: 30-31)?								
30.	How does your business unit's ability to reliably deliver products on time compare with your competitors?							
31.	How does your business unit's ability to promptly handle customer complaints compare with your competitors?							

No	Statements	The clarity of paragraph		The extent of the appropriate paragraph to measure what they may be put		The extent to which paragraph axle affiliation which contained in		Appropriate amendment
		Clear	Non Clear	Reconciliation	Inappropriate	Bice	Non Affiliate	
How does your business unit compare with your competitors on the below mentioned capabilities related to process flexibility (Items: 32-35)?								
32.	How does your business unit's ability to rapidly change product mix compare with your competitors?							
33.	How does your business unit's ability to rapidly change production volumes compare with your competitors?							
34.	How does your business unit's ability to manufacture broad product mix within same facilities compare with your competitors?							
35.	How does your business unit's ability to rapidly handle custom orders compare with your competitors?							
How does your business unit compare with your competitors on the below mentioned capabilities related to cost leadership (Items: 36-38)?								
36.	How does your business unit's ability to offer lower priced products compare with your competitors?							
37.	How does your business unit's ability to manufacture products at lower internal costs compare with your competitors?							
38.	How does your business unit's ability to reduce overhead costs compare with your competitors?							

Appendix (2)
Names of Arbitrators Questionnaire

No.	Name	University	Specialty
1	Prof. Dr. Kamel Al-Mugrabi	Middle East University	Business Administration
2	Prof. Dr. Mohammad Al-Naimi	Middle East University	Business Administration
3	Dr. Laith Al-Rubaie	Middle East University	Marketing
4	Dr. Hamzeh Khraim	Middle East University	Marketing
5	Dr. Hamid Shaibi	Middle East University	Business Administration
6	Dr. Ali Abbas	Middle East University	Business Administration

Appendix (3)

Questionnaire after reviewing

السادة الكرام

تحية طيبة وبعد ، ، ،

يقوم الطالب **سامر سمير خليل أبو راضي** بإجراء دراسة بعنوان:

Strategic Agility and Its Impact on the Operation Competitive Capabilities in Jordanian Private Hospitals

لأغراض الحصول على درجة الماجستير في إدارة الأعمال.

ونظراً لما تتمتعون به من خبرة في مجال عملكم، نرجو منكم التلطف بالإجابة على

فقرات الاستبانة المضمّنة، وإننا نعدكم بأن البيانات التي سيتم جمعها ستكون سرية لأغراض

البحث العلمي **فقط**.

شاكراً لكم تعاونكم ، ، ،

الطالب: سامر سمير خليل أبو راضي

ت: 0795511019

المشرف: د. كامل الحواجرة

الجامعة: الشرق الأوسط

Demographic variables

Gender: Male Female

Age: less than 30 years
 30 and less than 45 years
 Great than 45 years

Educational Level: Bachelor Graduate

Job Position: General Manager Vice President
 Unit Manger Head Department

Experience: less than 5 years 5 less than 10 years
 10 less than 15 years great than 15 years

Number of beds: less than 75 beds 76-100 beds
 101-125 beds Great than 125 beds

No	Items	Strongly agree 5	Agree 4	Neutral 3	Disagree 2	Strongly disagree 1
STRATEGIC AGILITY						
<i>Clarity of Vision</i> : Represents a clear, compelling vision of the ends an organization is working towards and the kinds of relationships and results it hopes to create.						
The clarity of vision in your business unit (1-4)						
1	We have a clear sense of purpose and use it to guide our decisions in running the business.					
2	We find it easy to explain our overall goals clearly and effectively to others.					
3	We have a high level of agreement about the principles that should guide our behavior in conducting our business unit's operations.					
4	We are proud of what we are trying to achieve as a business unit.					
<i>Understanding Core Capabilities</i> : Represents the awareness of an organization of its capabilities and how these capabilities can be used to create value for its customers.						
Understanding of core capabilities in your business unit (5-8)						
5	We can describe the special skills, knowledge, and know-how that comprise our greatest strengths and that we rely on to maintain our competitive advantage.					
6	When allocating funds for process improvement, we are able to identify those processes that are most likely adding value to our services from our clients' view point.					
7	We have a good understanding of which skills and knowledge are most critical to providing services that are important to our clients.					
8	We are well aware of our business unit's reputation among our clients and what we are best known for in the marketplace.					
<i>Selecting Strategic Targets</i> : Refers to the awareness by an organization of how it creates value and the ability to use it to select clients who will value what the organization is best able to provide.						
The selection of strategic targets in your business unit (9-12)						
9	We are able to identify the market/client segments that place a high value on the service attributes we provide.					
10	We know which of our business unit's core capabilities are most important in creating value for existing or new market/client segments.					
11	We know which competencies and processes we need to enhance or develop to better serve our targeted client segments.					
12	We have in place the processes for identifying and developing services that provide a good match between our hospital's capabilities and market opportunities.					

No	Items	Strongly agree 5	Agree 4	Neutral 3	Disagree 2	Strongly disagree 1
<p>Shared Responsibility: Represents the involvement of your value chain partners in decision making with joint accountability for the outcomes</p> <p style="text-align: center;">The sharing of responsibility in your business unit (13-16)</p>						
13	We ask people on our project teams to treat mistakes as opportunities for learning and improvement rather than occasions for placing blame.					
14	We provide easy access to information of interest to our clients and the people we work with.					
15	We encourage people on our project teams, including the client, to behave as though each of us is responsible for the final results of the total project, rather than just for the part we have been assigned.					
16	We keep our clients fully involved in the planning and execution of projects by stressing the importance of their role in getting results.					
<p>Taking Action: Represents an organization's ability to use its own and its value chain partners capabilities strategically to get results.</p> <p style="text-align: center;">Taking Action of your business unit (17-20)</p>						
17	We make sure that people we work with are extremely or fully familiar with our strategy and its purpose.					
18	We are able to adapt our strategy to fit changing circumstances without losing sight of the strategy's overall purpose.					
19	We involve key people we work with in discussions of our strategies and solicit their thoughts on the best way to implement them.					
20	We frequently discuss with people we work with the kinds of actions needed to best carry out the business unit's strategy.					
<p>OPERATIONAL COMPETITIVE CAPABILITY</p> <p><i>Focal organization's strength relative to its competitors' on five operational capability dimensions of innovation, quality, delivery reliability, flexibility and cost efficiency.</i></p> <p>Innovation: Refers to the capability of an organization in developing new Services, processes and working methods.</p> <p>How does your business unit compare with your competitors on the below mentioned capabilities related to innovation (Items: 21-24)?</p>						
21	Our business unit has the ability to develop new methods at a high rate compare with our competitors.					
22	Our business unit has the ability to develop new features in existing services at a high rate compared with our competitors.					

No	Items	Strongly agree 5	Agree 4	Neutral 3	Disagree 2	Strongly disagree 1
23	Our business unit has the ability to develop new service technology at a high rate compared with our competitors.					
24	Our business unit has the ability to develop new working methods at a high rate compared with our competitors.					
<p>Service Quality: Refers to the capability of an organization in providing services that conform to established specifications, are reliable and provide overall satisfaction to the customers.</p> <p>How does your business unit compare with your competitors on the below mentioned capabilities related to service quality (Items: 25-29)?</p>						
25	Our business unit has the ability to provide services of high level of quality compared with our competitors.					
26	Our business unit has the ability to provide services with high level of performance compared with our competitors.					
27	Our business unit has the high level of service quality as perceived by the client compared with our competitors.					
28	Our business unit has the ability to provide a high level of conformance quality compared with our competitors.					
29	Our business unit has the ability to provide a high level of service reliability compared with our competitors.					
<p>Delivery Reliability: Refers to the capability of an organization to deliver on time service consistently.</p> <p>How does your business unit compare with your competitors on the below mentioned capabilities related to delivery reliability (Items: 30-31)?</p>						
30	Our business unit has the ability to reliably deliver services on time compared with our competitors.					
31	Our business unit has to promptly handle client complaints compared with our competitors.					
<p>Process Flexibility: Refers to the capability of an organization to provide a large variety of services within its existing facility.</p> <p>How does your business unit compare with your competitors on the below mentioned capabilities related to process flexibility (Items: 32-35)?</p>						
32	Our business unit has the ability to rapidly change service mix compared with our competitors.					
33	Our business unit has the ability to rapidly change services volume compared with our competitors.					

No	Items	Strongly agree 5	Agree 4	Neutral 3	Disagree 2	Strongly disagree 1
34	Our business unit has the ability to provide broad service mix within same facilities compared with our competitors.					
35	Our business unit has the ability to rapidly handle clients' needs compared with our competitors.					
<p>Cost Leadership: Refers to the capability of an organization to provide services at competitive prices. How does your business unit compare with your competitors on the below mentioned capabilities related to cost leadership (Items: 36-38)?</p>						
36	Our business unit has the ability to offer lower priced services compared with our competitors.					
37	Our business unit has the ability to provide services at lower internal costs compared with our competitors.					
38	Our business unit has the ability to reduce overhead costs compared with our competitors.					