

# An Analytical Study of the Strategic Flexibility Variation as a Function of the Dynamic Capabilities Based on Supply Chain Management (Case Study: The General Petroleum Products Distribution Company in Baghdad)

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**Abstract-** This paper represents an advanced contribution to explore the nature of the dynamic capabilities based on supply chain management in the oil distribution company as a vital field within Iraq and how to activate these capabilities in achieving Strategic flexibility, drawing on past experiences and literature in establishing a scientific and field basis for this company. The purpose behind this paper is to introduce a new understanding of the concept of dynamic capabilities based on supply chain management and whether it is possible to adopt advanced capabilities in management and the possibility of applying them in an Iraqi company and what is their role in achieving strategic flexibility. This concept was clarified through a framework to learn more about how these concepts work. The study has been conducted in the General Petroleum Products Distribution Company (Baghdad) drawing upon a research sample of the company's leaders (directors of managements and departments) within the company. It consists of 33 out of 56 directors. The study adopts the questionnaire method in data collection including four dimensions of dynamic capabilities (capability of sensing, learning, integrating and marketing) based on supply chain management and three dimensions for the variability of the strategic flexibility (marketing flexibility, productivity, and competitiveness). The study uses a set of statistical tools based on the SPSS 23 and EXCELL 2013 programs to measure the description and diagnosis of the sample, the variables of the research, the measurement of the correlation and the effect of the different tools. The study reaches a set of conclusions, the most important of which is that the multi-dimensional dynamics model affects the achievement of the strategic flexibility within the company and to varying degrees of dimensions.

**Keyword:** *strategic Flexibility, Variation, Dynamic Capabilities, Supply Chain Management, Company.*

## 1. Introduction

A paper was published more than a quarter of a century ago by [1] on dynamic capability, leading to a series of subsequent researches. In 2002, this paper received an award of the Best Strategic Management and it was considered as the paper with most citations for the period of 1995-2005, in the Science Watch Index of Scientific Research in Economics and Business in 2005. However, the concept of dynamic capability has often been described as abstract and beyond reach. Although strategic management and dynamic capability are the most cited articles, they still face criticism and in need of more empirical tests and verification and a growing number of researchers in the past decade have found that, dynamic capability is at the heart of creating values, fixed strategy and competition property [2], [3], and [4]. However, exiting studies are still leaded with vague explanations that have not yet been confirmed through empirical analysis. Strategic flexibility can provide the company with a competitive advantage of generating options on decision makings and various kinds of strategic flexibility to blend with the changing and dynamic environment that the competitors may find difficult to imitate. Strategic flexibility gives firms the ability to deal with changing environment; the strategic flexibility relies commonly on the sources of the flexibility found in the resources available to the company and in the ability of the company to implement the resource in alternating courses of action. It thus opens up new horizons for researches to link the logical relationship between the dynamic capabilities and flexibility for the companies to gain competitive advantage by possessing substantial competencies that are difficult to imitate through this followed magical combination. Other forms of strategic flexibility might

need different capabilities just like the ones that operate proactively with a change in leadership. However, a competency that has been created may become a one-time competitive advantage, old or not valid for practical applications over new products.

One of the most important justifications to proceed with this paper is that there are many criticisms that the approach of dynamic capabilities is not a clear concept [5] and is not measurable without empirical basis [6]. The term “dynamic capability” was even disputed by some researchers like in the case of [7] who opined that dynamic capabilities take us to concepts that contradict logic at the same time, so the aim of this paper is to widen the range of the theory and the current applications of the concept of dynamic capability. According to [8], in the absence of the capability to measure dynamic capability (usually intangibles) along with any level of accuracy, it is assumed that the capabilities grow as a function of the company’s aggregate experience. It was indicated that, dynamic estimations are often determined empirically one after the other [9]. [10] stated that, the presence of dynamic capability is always considered with no specification on its precise measurements. [11] quotes the skeptics who say that even the dynamic capability estimations “were born, not made” due to its difficulties in explaining the measures and properties of dynamic capability and their existence, in reality, were challenged while others [12] at the other hand stated that performance is closely related dynamic capability. Lastly, there is an idea that dynamic capability might not be manageable [13], which means the dynamic capability might not be recognized in reality by the managers. Preliminary surveys of the current study carried out in the company showed that there are signs of great interest in the strategy and all the related issues, but the administrative stalemate and a large number of procedures and routines prevent these expectations from being realized. The research process on how to realize the dynamic capabilities of the oil distribution company is controversial. How to achieve these capabilities without the availability of flexibility breaks the barrier of routines and restriction. Besides, this debate goes on from a different perspective that if the dynamic capabilities are available within the company, they will create a state of strategic flexibility to help it in the process of achieving its strategic goals without obstacles and restrictions that prevent this.

The current study focused on the capabilities that are related to companies from the point of dynamic capability view, sensor capabilities [14], learning capabilities and integrating capability [15] and the ability to coordinate [16] and the range of the relationship

associating it with the strategic flexibility in their dimensions [17]: competitive flexibility, marketing flexibility, productivity flexibility in order to study the relationships involved, a number of officials of the oil distribution company were interviewed. Given the nature of the oil industry, these companies represent the appropriate context for creating and verifying the research model. One of the demanding and sophisticated sectors in the Iraqi economy today is also the oil distribution companies. The aim of this study is to test, evaluate, and discuss the framework of dynamic capabilities and its relationship to strategic flexibility. We believe that it is necessary to identify and model dynamic capabilities that actually drive companies' performance into flexibility in order to link dynamic capabilities with strategic flexibility. This study also intends to expatiate more on the idea of dynamic capability and their effect on the company's strategic flexibility. Therefore, our goal is not to provide objective research results per se, but also to expand the debate over the nature and determination of the dynamic capability in total. A concise literature review on the will be included in this study on strategic flexibility and dynamic capability, resulting in accounts on theory of possible connection between the two dimensions and then how the relationship can be clear in practice by examining the variables quantitatively. The other objective is to discuss two critical issues of the concept of dynamic capabilities.

First, what are the conditions for the dominant role of dynamic capabilities in strategic management?

Second, can the dynamic capability concept be addressed as a theoretical and methodological framework for strategic choices in modern organizations?

The attention of many potentials and promising ways are drawn by this study as produced by dynamic capability to the development of a strategically flexible organization. The research will be divided into sequential sections dealing with reviewing the literature of the two variables and then reviewing the research methodology altogether with the research sample, the method of measuring involved in the research and the tools used in it. The third section, which discusses the results, concludes the paper with a discussion of the effects of the study on academics and practitioners.

## 2. Review the literature

### 2.1. Dynamic Capabilities

The first paper presented on the concept of dynamic capability by [18] clearly produced volume of research papers: from 1997 to 2008, more than 1721 papers in the

top management journals [19] and more than 1900 reference citations in December, 2009 [20]. Nevertheless, this area remains largely conceptual and focuses to a great extent on issues at the institution level [21]. Dynamic capabilities are an area of research that seeks to understand why a company outperforms others, or a framework for determining how a company can manage its various resources in an orderly way to outperform the competition. According to [22] the authors define dynamic capability classically as the ability to configure, build and integrate both external and internal resources to rapidly tackle the continuous changing the in business environments. In addition, it is believed that managers, entrepreneurs and their behavior drive the major role in the formation of dynamic capability.

In dynamic capability, there are four organizational capabilities: the first is the formation of effective processes of innovation and change management, the second is the important vision and intuition business model creation, the third is the formation of a systematic mechanism for effective investment decision, and finally, effective transaction management. It is essential to integrate immediately responsive mechanism in order sustain and build dynamic capability for changing in the system environment for the management of an organization. The concept of dynamic capability as an extension of the resource-based vision has been introduced as one of the most promising concepts to the question of how institutions can keep dynamic performances in a changing environment.

According to [23], dynamic capability is a special type of organizational capability that must be different from the capabilities of a functional organization. They are also capabilities of "higher order" that intentionally work to reshape functional capability in accordance with the conditions of the new market. Rather, the ability of a company to recognize an emerging threat or opportunity is called dynamic capability [24]; as for [25], dynamic capability is considered as a fraction of capabilities or competencies which allows companies to invent new processes and products in respect to the conditions of the changing markets. [26] show that, it is the ability of the company to build, integrate and recreate both external and internal competencies in addressing changing environment rapidly. In contrary, [27] reviewed its concept as the company's operations that employ resources-specified process in acquiring, creating, matching, integrating, releasing and reconfiguring resources and change in the market. Therefore, dynamic capability is the strategic or organizational routine through which a company achieves new configurations

of resources as market collides, divides, emerges, dies and develops. [28] Consider it a more modernized competitive source of insight into how companies cope with changes in the environment.

Furthermore, dynamic capability develops from to stages: through a careful development called "the development of management capabilities in the company" and the overall development connected to "restructuring market efficiencies". Also, [12] demonstrate that, the concept of dynamic capability is capability deliberately directed to change and help companies in resource-based redeployment and restructure in order to meet the emerging competitor strategies and customer requirement. Moreover, dynamic capabilities are static patterns of group activities by which organization produces and adjusts systematically its actions in order to improve efficiency. [13] emphasizes that these capabilities are meant to expand, create and modify ordinary capabilities (objective) and finally, [10] explained that dynamic capabilities include that capabilities of institutions that are challenging to reproduce in order to blend with the changing in the opportunities of technology and customer. [15] go beyond the question of resources and focus instead on the organization's operational routines and suggest that dynamic capability is a stable and inquisitive trend of a group's activities that an organization creates and adjusts systematically to their procedures for operations in an effort to improve effective management. [5] determines that competencies are defined as separate business processes of the organization that underlie management processes, as well as returns at the organizational level. [15] identified three important entries in the definition of dynamic capabilities. The first is the innovation supported by [8], which is in accordance with the newly created models on decision-making using innovation measures based on dynamic capabilities. The positive result should be to overcome the lack of flexibility in organizational capabilities. The second radical approach, supported by [6], is the development of the capacity of "the entire learning organizations". Organizational capabilities are converted into regeneration/ reproduction capabilities and are able to respond to rapid changes in unpredictable market expectations, allowing the organization to achieve competitive advantage. The final integrated approach, supported by [16], involves, with its key ideas, entering a dynamic dimension within an organization that allows to improve its capabilities in a rapidly changing environment. The structure and assets of the organization are gradually evolving in accordance with the environmental change and the asset transformation of the organization through progressive

improvement. If patterns of organizational behavior are continually adapted, the organization may lose its capability. Contradictions and ambiguities in the extended literature reveal that researchers tend to determine dynamic capabilities after a conclusion, indicating their existence through the growth and profitability considered as the outcomes of a successful organization. When the managers or entrepreneurs develop or build capabilities, the challenges reaching them can be reflected in the practice and the hardship of differentiating between the conversion of an existing capability and the devising of a new technical capability i.e. the implementation of dynamic capabilities to reshape the uses or resources of the company.

It is revealed that dynamic capabilities visualized and evaluated in a way that makes it impossible or difficult to segregate their effects from their existence. Some scientists also associate the existence of dynamic capabilities with environmental conditions; [2] for example, specified those dynamic capabilities that depend on the company's capability of dealing with rapid changes in the environment. In a dynamic environment, the use of dynamic capability is clearly greater but the organizational capacity should not be confused with external conditions. Companies can acquire temporary advantage in a dynamic environment that disappear with a change in the condition of the environment and they must continually reshape the resources to protect the competitive advantage. However, making a judgment on whether "Dynamic" depends or not on the degree of change in the external environments of the company lacks the real nature of the distinction between the capabilities of the first order and the second order. Moreover, the necessity of renewing or restructuring routine might arise from the conditional change of the organization (e.g. resources change) in contrary to the external environment. For instance, [14] mentioned that when a new company experiences or grows rapidly, how to configure the internal process becomes a challenge in order to achieve effective integration, effective functional specialization and their cultivations. Also, the ability of a company to implement the desired change will prove dynamic whether it is true or not if the company's leaders believe that working in a much diverse form will enhance the performance irrespective of the level of environmental volatility. Many researchers opine differentiating between functional, operational and dynamic capabilities, particularly in the case of [13] who distinguished between higher-level dynamic capacities that focus on changes and lower-order operational capacities that described a meaningful combination of material

resources which allow companies to execute functional activities like: manufacturing, sales, marketing and logistics. The operational and normal are also distinguished and enable the operational capabilities of companies to perform their daily lives. Contrarily, those that allow the companies to restructure its operational activities constantly are the dynamic capabilities and a long-term competitive advantage is achieved. Based on the literature review, an institutional capability group was emphasized and analyzed from dynamic capability's point of view. First, the duty of the dominant managers in the dynamic capability development [8] and marketing capacity as a constant source of competitive advantage [18] and the third is related to technological capability which is connected closely with the ability to develop and research that is the basic capability of each dynamic environment of today. The fourth is the capability to research and development which is the capability to access and use knowledge, the capability to research and develop or generate innovative potential. The fifth one is for the companies with technology like companies venturing into information technology which is related to exploiting and gaining new knowledge via resource-base which is the main factor for successful business [10] and finally the capacity of human resources is one of the main sources of competitive advantage.

In the study of competitive advantage source, one of the widely most studied capabilities is the human resources. Resources are not only the sources of competitive advantage, but also from the ability of the company to reshape, integrate and create new resources. Routine is focused on by other papers. [5] focused also routine by describing dynamic capability as an organizational, specific and determinative process such as transformation, strategic decision-making and product development which create values within the dynamic markets for firms. Nevertheless, as [19] claimed that dynamic capability shows commonality across strong companies, there is clear difference regarding a resource-based view of exclusivity and inevitability and these attributes stand for a kind of "best practice" that are transferred to a company from another. Therefore, dynamic capabilities are considered a condition of necessity, but are ineffective for competitive advantage. Despite the notion that dynamic capability is a relatively recent concept, it has faced a lot of criticism. There is no clear understanding of the accurate nature of dynamic capability. A school of thought argued that the concept is both twisting and ambiguous: dynamic capability is the resource that enhances organization to maintain competition, though it can be concluded that it is only

when successful organizations are looked at throughout the long-period of time. As there have been a very little studies that have enabled the operation and development of the so-called dynamic capability to be observed with time, [9] states that this has led to a second weakness. The differences in terms and mutual relations have also caused some confusion. Does dynamic resource exist in the resource or only in the change process? Does this routine become dynamic itself if the procedures can be developed to change the configuration of the resource? Alternatively, what if the routine itself changes, does it means "dead" dynamic capabilities?

Much of the literature shares the idea that dynamic capabilities emphasize that the capabilities of companies change over time, yet the literature refers dynamic capabilities as the only capabilities that are responsive to environmental change while others demand that a source of competitive advantage is provided alone by dynamic capabilities. In theory, the requirement that only dynamic capability leads to a competitive advantage is an unsatisfactory proposition. Although, most concepts mean that dynamic capability which might be valuable potentially are correctly pointed out. The researchers view is that dynamic capability provides indirect values. [17] for example noted that, unlike the development of

new products, dynamic capabilities "do not involve the good production or provide marketable service". The ability to change the routine procedures is considered as valuable as the resulting technical capabilities are of value. To achieve the outlined objectives, dynamic capability should be considered. Capability management is therefore crucial to achieving benefits associated with the performance of an organization. Moreover, the use and construction of dynamic capability is expensive and can lead to either gain or loss. Some even affect short-term performance while others are possibly important in the long-run. A secondary role is played by some dynamic capabilities in enhancing the objective capability to generate values. A variety of situations can result to dynamic capability, varying in timing and effects. In short, this study lays more emphasis on capability dynamic more than the environment itself. In accordance with the critical approaches and analysis of how the dynamic capability is determined, the final phase described in Figure (1) has been determined as an interaction in a serial logic to restructure the current operational capability. However, there are interrelationships between these capabilities that are theoretical in describing the proposed dynamic capability.

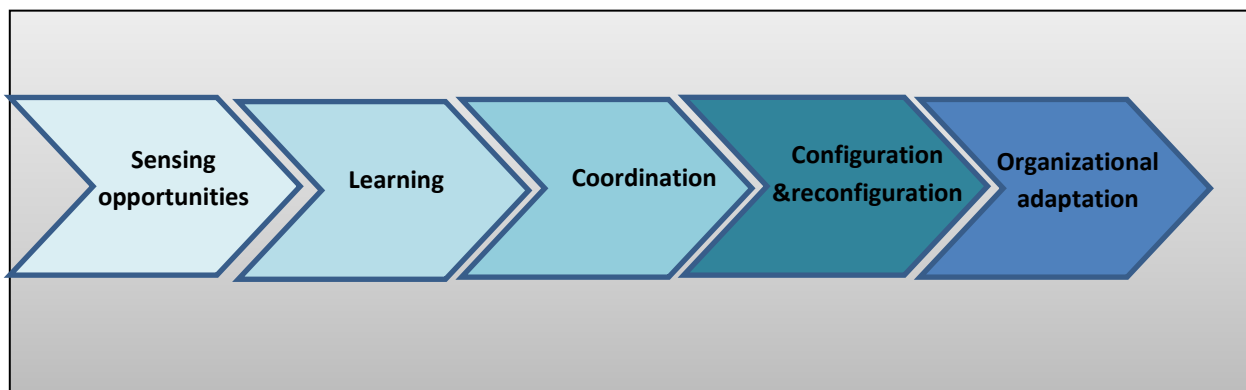


Figure (1) Dynamic capacities

Source: [18]. The Impact of Strategic Intelligence on Firm Performance and the Role of Strategic Flexibility: an Empirical Research in Biotechnology Industry

- *Sensor Ability*: Restructuring requires monitoring of new technology and market trend and capturing or feeling opportunity. The capacity of the sensor is the ability to detect, interpret, and follow up the environmental opportunity. Different units of business must be able to interpret the environment to acquire information on the market and about their wants, competing movements and identification of new technologies for identifying opportunities for new

products and decision in engaging in activities of exploratory research in an early stage to follow up with these opportunities. There are three basic things that must be taken into consideration in sensing capability: (1) Market information [28]; (2) The dissemination of market information [26]; (3) The response to the information.

-*Learning Capability*: [22] states that a market opportunity must be addressed with new products that

need a decision to renew learning capability, new skills and knowledge, once the market opportunity has been identified. Learning must be engaged to create new knowledge, identify new solutions and reform the current operational capability to develop new product. According to [21] and [25] as learning promotes the ability to discover new opportunity, there is a reciprocal two-way relationship between learning capacity and remote sensing. Learning and sensing capabilities are quite distinctive capabilities as learning focuses on creating new knowledge through market information and sensing focuses on acquiring information about the new market.

*-The ability to integrate:* Restructuring depends on the integration of new assets and resources. [28] states that, it is due to the restructuring of the present operational capabilities that there is a need for common interactive pattern and collective logic. New knowledge should be incorporated on a collective level as the newly created knowledge by learning is mostly controlled by the individual. The ability to integrate is also the ability to incorporate individual knowledge into a unit of new operational capability. The contribution, representation and interrelationship between the individual inputs of the business unit in the collection are linked closely to dynamic literature. To be specific, the contributions relate to the deployment of individual inputs among the units of the businesses. How people behave, fit and relate to others is what representation means.

The correlation is related to the integration of contributions from individuals into a unit to refine the remodeled operational capability through the implementation of an activity in the collection. It is then proposed to combine the capability to facilitate the restructuring through the three basic procedures such as: first, the inputs to the business unit enhance to integrate and collect individual contributions. Secondly, a common understanding is built by representation, develops a new sensory scheme and creates a common ground. Thirdly, as restructuring needs new pattern of collective interactions, interdependence improves the routine of reconstituted operational capability. The group having more integrated capability can interact best in the new situation [26] while the dynamic capacity is viewed by [3] as a collective activity on the grounds that disassembled restructuring with no exercise on dynamic capacity. Finally, [5] see knowledge integration as the basic for dynamic capability.

*-Coordination Capability:* Coordination allows reshaping by managing resources, activities, tasks to convey the restructured operational capability as the configurations of the new operational need a

synchronization of activities and effective coordination of resources and tasks. The ability to coordinate activities, resources and tasks in a new operational capability and disseminating them is called coordination capability. The dynamic literatures determine the fundamental procedures of capability coordination; that is the identification of the right task for the right person [15] and the identification of synergies and complementarities between resources and tasks [13] and the organization of group activity. However, the capability to integrate is positively correlated with coordination as coordination is promoted through a common language.

The capabilities of integration and coordination are practically and theoretically different. [28] stated that integration focuses on building an inclusive collective understanding and sense while coordination focuses on the organization of individual activities and tasks. It is suggested that coordination can be made to promote the restructuring of operational capability. Firstly, it enables units to allocate, identify and collect resources by facilitating the dissemination of market information in the organization. Secondly, the coordination of capabilities supports the company in assigning the right task to the right person. Thirdly, the coordination of capabilities supports the business to synchronize better their activities and task. [19] argued that “[dynamic] capability is included in different ways of coordination”. [18] says, “In short, innovation and restructuring may require the collection of common assets by management in order for innovation to occur”. The active distribution of resources supports the dynamism of the dynamic capabilities by assigning the right task to the right person, which is an essential part in any successful restructuring. Also, coordination is the process whereby people adapt, recreate and reestablish organization [4]. Thus, coordination capabilities help in implementing and disseminating restructured operational capability.

## 2.2. Strategic Flexibility

Among the researchers in their various studies (strategy, marketing, organizational theory ...), there are a large number of concepts and definitions of the term strategic flexibility, as [27] shows that the beginning of experimental research of strategic flexibility was through three main entrances: Flexible man entrance, flexible operation entrance, and flexible style entrance. The researchers also demonstrated that there is a possibility of applying the term "strategic flexibility" at two levels. The first one is at the organizational level where it

denotes the capability of the organization to be responsive to and act in accordance to the changes in the environment. The level of the decision makers is the second level; it ranges from new and alternative options in making strategic decisions which are considered and formulated. These two levels do not rule out each other because finding different options on the part of decision-makers is a criterion to adapt to the environmental changes of the structure. From another vein, decision-makers must have the strategic flexibility capability for strategic flexibility at the organizational level to exist.

Companies that live in a very complex and dynamic state require a flexible design system to respond to a high frequency of changes occurring in dynamic markets. For example, [25] book "Strategic Flexibility" suggests that strategic flexibility examines the company's capability to change its position in the market, that is, change its plans or even disintegrate its current strategies, when losing its attractiveness to its customers as it was in the past. In a different concept, [24] argues that flexibility can be conceptualized in two ways: the first relates to strategic diversity; the second refers to the degree to which a company can rapidly shift from one strategy to another. The strategic flexibility of the company is jointly dependent on flexibility (flexibility of resources) and the flexibility of the company to apply those resources to alternative workflows (flexibility of coordination). The core of the company must be difficult to imitate because it is composed of and dependent on the relevant activities, and these activities might be associated with each other to be understood better. Flexibility can be understood as well on the ground that it is a basic property between the system and its external environment. Flexibility in the system or processes is required to be able to respond to environmental changes or changes in perceptions of the decision maker to reality. The development of flexibility can be seen as an administrative task where the primary focus is on managers' ability to make accurate and important decisions. In its purest form, flexibility can be seen as a capability to do something other than originally intended and can be considered as a response to environmental changes and uncertainty. Therefore, the company must be flexible throughout the organization to deal with environments that are increasingly demanded.

Flexibility has gained considerable importance in recent years, as [16] has studied in-depth flexibility and stated that the strategy and flexibility will grow significantly in the future. Thirty years later, flexibility became deeply rooted in strategic management processes. According to [18], to keep firms capable of competition in contemporary markets, the process of formulating and

implementing strategic initiatives must include explicit and explicit flexibility at various levels in the organization. Thus, strategic flexibility is property ownership that allows modern organizations to prepare and confront all changes (which are highly unpredictable) in their environment. According to Raynor, the concept involves the interaction of many elements, including actions taken with regard to analytical studies aimed at predicting multiple scenarios; developing strategies for each scenario, acquiring the resources and skills (capabilities) required to implement those strategies, implementing the most likely strategy, preparing for the task of a quickly adoption of an alternative strategy if necessary. As for the convergence of strategic flexibility from other concepts, other terms provide a similar conception of strategic flexibility as "the capability of strategic development", "organizational flexibility" and "the dynamic capabilities". Some researchers have used the concept of strategic flexibility as synonymous with agility. Although the terms are sometimes linked, they have different connotations in terms of the company's strategy point of view. Agility is associated with the strategic level of the process while flexibility relates to the tactical aspects of the process, so the two concepts must be treated as complementary and not one thing.

As for the relationship between strategic flexibility and productivity, there is a contradiction in the findings of studies, some show a negative correlation and others indicate positive relationships, but [28] believe that the correlation between the two concepts helps companies achieve sustainable competitive advantage even in highly volatile businesses. Flexibility is associated with the formulation and implementation of plans as shown in many experimental research. Successful dynamic companies do not take into account the calculation of the effects of the external factors even if they adopt fairly routine planning processes. In such a case, planning strategies usually include flexible points, that is, the items that change depending on external circumstances. Early research on strategic flexibility suggests that flexibility makes the organization less vulnerable and more responsive to unpredictable environmental changes. [13] has associated the term "adaptation" with the organization's capability to respond to an unexpected change. [24] described the "capability to maneuver strategically" to the extent that strategic behavior can be achieved. [26] talked about the strategy of competition and took a more deterministic view of the strategy that is still dominating the strategic management literature of the day. He also stressed the strategic choice as the company has a set of strategic options generated and

adopted on the ground of analyzing the external environment, and on this basis strategic flexibility can be described as the company's available strategic option and the capability of that company to take advantage of them. It is important to note that any definition of strategic flexibility relates to the views of the authors of these definitions as well as any definition of flexibility that you will find it combining both internal and external perspectives. Although the definition of strategic flexibility differs from one researcher to another, it is not significantly different. [13] defines it as the ability of a company to respond to uncertainties by modifying its objectives with the support of its knowledge and higher capacities. [10] defined it as the organizational capacity to adapt to environmental changes. They differ in terms of the length of time needed to respond to environmental changes, the range of options available, the orientation (whether aggressive or defensive), the focus area which establish flexibility (external or internal). Strategic flexibility is the capability of the organization to identify major changes in the external environment and quickly allocate resources to new business cycles in response to changes and recognition and act quickly when the time comes. [14] defined strategic flexibility as "the capability of the organization to adapt to large, uncertain and rapid environmental changes that have a significant impact on the functioning of the organization". [24] defined the term "strategic flexibility" widely by strategic researchers to denote the capability of companies to respond to diverse demands from dynamic competitive environments". As for [22], he identified it as the capability of the company to adjust strategy. Further, [22] defined it as the company's capability to identify changes in the environment, and to make the resources as responses to changes and to act efficiently in allocating resources during changes. [26] defined strategic flexibility as the company's ability to respond, precaution, manage or adapt to the market volatile conditions, backed up by its resources and capabilities to keep up with a competitive distinction. Most of the definitions in the literature indicate flexibility in the strategic dimension, and in fact, few of them defined strategic flexibility per se, and even if they do this they lack a systematic access to the concept in question. [12] defines the strategic flexibility as a capability to transform corporate operating activities into a new line of business, even if it is far away from its predecessor. Therefore, the strategic flexibility definitions can be divided based on the main entrances, illustrated by [22]. They are in the range of possible strategic options, business differentiation, frequency of changes in competing priorities, turbulence resulting from a shift to

a new line of business. In addition, the full definition of strategic flexibility should also address the internal and external dimensions, i.e. not only dealing with strategic risks and environmental changes, but also the ability to proactively utilize resources in an interactive manner. [25] point out that strategic flexibility should not only maintain the stock of current trends and environmental changes, but should also create and enhance operating conditions that ensure rapid, even the most extreme, changes. The strategic flexibility consists of several concepts required to deal with environmental changes: "liquidity, adaptability, corrigibility, agility, hedging, robustness, elasticity, plasticity, malleability, survivability, and versatility".

[24] found recently that when measuring strategic flexibility, many strategic management principles were useful to maintain a flexible company in the hard business environment. First of all, having the right management principles allows units to break normal procedures when dealing with emerging challenges. Secondly, it helps maintain smooth communication mechanisms in the company; and thirdly, having the right management principles changes strategies and structures effectively when responding to changing environments and finally, actively embraces new management styles. When addressing the dimensions of strategic flexibility, we find that the dimensions are multiple in accordance with each researcher, some of them deal with the flexibility of equipment, software, and modification. [24] identified the possibility of measuring strategic flexibility in three dimensions (marketing flexibility, productivity flexibility, and competitive flexibility) which we will adopt as a measure in the present paper. Marketing flexibility suggests that the process of enabling companies to expand and enter international markets and gain an appreciation on that international basis and discover differences in activities performed in local markets. As for productivity flexibility, it indicates the company's capability to produce multiple products and services with competitive prices over the most of the global markets, it indicates to the company's capability to produce multiple products throughout multiple facilities and production lines. As the company takes on more flexibility in the process, the more it allocates products for more production lines, the better the company's capability to adapt to the demands. With regard to competitive flexibility, it is the ability to compete in an intensive and uncertain environment. Among the main concerns is the attention to the needs and desires of customers and the transformation of these needs and desires into targeted capabilities or areas called (competitive dimensions),



these dimensions are focused upon by organizations which showing great interest while providing services and products to meet market demands, it can help the organization achieve a competitive advantage and superior performance of the company.

### 2.3. Dynamic capabilities and supply chain

Supply chain tend to have even more dynamic changes than casual markets for such reasons as constant change of customers behavior, or significant influence of non-governmental institutions. Also, strategy can provide a competitive advantage when aiming to achieve long term development in technologies, machines, instruments of process management. Despite that supply chain management and dynamic capabilities are two expanding directions in the field of research and both were at the center of scientific studies, the relation between these topics was very weak. It was difficult for supply chain management study to grasp the notion of dynamic capabilities. An approach that connects supply chain management and dynamic capabilities is implementing at a high rate. It reveals theoretical structure, based on supply chain management practices, while using dynamic capabilities theory, and finding and connecting specific dynamic capabilities into specific repeated practices. Existing literature can be included in structure, which comprise the theory, and is a step towards the creation of relation between supply chain management and dynamic capabilities. This can be considered only a part of theory, because it lacks some of criteria, but it really helps the process of creating a theory [29]. Conceptual model connects several separate publications on this topic and connects them into one work with new ideas. Notion can be used for creation of theory, because it allows the researcher to connect the data with which [30] was working. Similar to dynamic capabilities study, supply chain management study is also relatively new

topic, based on logistics and literature of supply chains. In recent years, supply chain management became really important. This is evident from an increasing number of works conducted in this field in recent years. Similar to the dynamic capabilities notion, supply chain management information is transmitted. Material and information moves up and down the supply chain [31]. Focuses on possibilities of supply chain management in every dynamic capability rather than on central companies, who control dynamic capabilities. Additionally, governmental support was described as strategic orientation, which is needed for all organizations that take part in the supply chain.

### 3. Methodology of the Study

The study depended on the exploratory method in addressing the opinions of the leaders of the directors of the petroleum products distribution company and what their estimates are based on the study scale. The study also relied on the descriptive analytical method by interpreting the collected data after it was analyzed by statistical means to reach the results of the study.

### 4. Research Hypotheses

The main hypothesis: There is a significant correlation between the dimensions of Sensing Capability, (Learning Capability, and Integrating Capability), in the dimensions of the strategic flexibility (Marketing Flexibility, Production Flexibility, and Competitive Flexibility), and the hypothetical schema (2) below shows the hypotheses of the research.

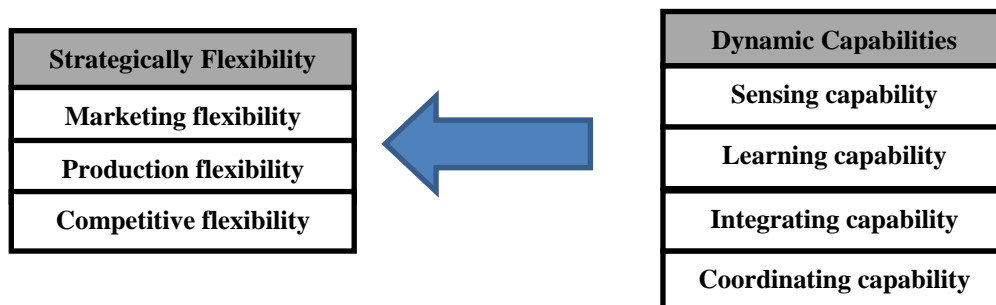


Figure (2) the Hypothetical schema

## 5. Data Collection Method

The study relied on the questionnaire as a main tool in data collection. The questionnaire included a welcome message to the department managers explaining the purpose of the study and how to fill out the questionnaire. It used the 11-level Likert scale, which shows the sample agreement from 0-10, the statisticians recommend using this level instead of the seven-point, five-point, and triple-scale to avoid inaccuracies in estimating the parameters of the model and bias in values. The questionnaire also included a set of items concerning the personal and occupational information about the research sample. The most important part was for the main search variables (dynamic capabilities) based on supply chain management with its four dimensions related to the capability of sensing, learning, integration, and coordination, adopting the scale [11] and the strategic flexibility with its three dimensions: flexibility of marketing, production, and competitiveness, adopting the scale of [14].

### *Society and the Research Sample*

The study was conducted in the General Petroleum Products Distribution Company located in Baghdad, where the research society consisted of the leaders of this company amounting to 55 directors of department and department manager, the study was conducted on a sample of 33, i.e. 60%, the number of department managers was 14, i.e. 42%, and department directors were 19, i.e. 58%. The sample was dominated by males with a percentage of 91% males and 9% females. The sample age was variant, the biggest part was for the (1940s) with a percentage of 39%, and the (1950s) came second with a percentage of 31%. Then, the (1930s) with 18%, and the (1960s) came with a percentage of 9%. This is due to legal reasons regarding the general employment law in which the employee is referred to retirement at the age of 63 years. Besides, the category of the twenties was the lowest of only 3% due to the government's recent intentions to stop the appointments. As for their educational attainment, the lowest category was for the PhD holders, they were 2 only, Master's degree holders were 3, whereas the Higher Diploma holders were only one person. The majority were for the holders of the bachelor's degree, and to obtain answers that reflect reality, the researcher should ascertain the depth of the official knowledge of the job. The years of service were investigated for the managers, the proportion of their service ranged from more than 5 years, i.e. 61%, while the range of 3-4 was 19% and 2-3

years 12%, and 1-2 years 12% and finally those who held the position in less than a year, they were only 6%.

## 6. Results

In this part of the study, we review the results of the statistical analyzes of the data collected from the directors of the bodies and departments in the General Company for the Distribution of Oil Products by means of the research questionnaire, and this review will be in the form of parts: the first includes description and diagnosis of search variables through the use of certain statistical tools such as Mean, Coefficient of Variation, Standard Deviation. The second part is intended to display the results of the Person Correlation to see the results of the correlation of the main and sub-variables with each other and then the final part, which includes testing the basic and sub-hypotheses, involving a set of tools (Simple Linear Regression, which includes tests (T, F, A, B, R<sup>2</sup>) to measure the effect of independent variables over the variable linear regression. These analyzes were carried out after confirming the validity of the scale and its accuracy and stability, the researcher can use the statistical tools and end up with reliable results.

### **6.1. Description and diagnosis of dynamic capabilities based on supply chain management**

Table (1) shows the dimensions and items of the independent variable (dynamic capabilities based on the supply chain) and the statistical tools used to analyze the results. Statistical results show that the independent variable of dynamic capabilities obtained a weighted arithmetical mean of 6.41 which is higher than the hypothetical arithmetical mean which is 5. [14] points out the levels of the arithmetical means, according to this scale and the medium level ranges from 3.64 to 6.36 in different categories. The good level up to the excellent ranges from (6.37 to 10.0) and with a standard deviation of 1.98 showing the intensity of the sample response to the answer. Given that the standard deviation of the total of the sub-items may be more than 1 because the scale of category 11 allows the sample to search more space reflected on the dispersion measurements. The result of the coefficient of variance is 0.31 reflecting the sample agreement on the answer. The variable included four dimensions. The first dimension is sensing capability, with an arithmetic mean of 5.64, which shows that there is a moderate interest in this dimension according to the

views of the sample and coefficient of variance 0.35, reflecting the variance of the responses which is acceptable to a large extent, and it is possible to observe these results through the arithmetic means which have been clarified to the items of this dimension. The first item was slightly below the weighted arithmetic mean and the coefficient of variance was the largest among the items.

The sample answers show that the interest in the environmental survey to identify new job opportunities was not at the required level and needed more attention. However, more attention has been given by the company leaders to the references of the developmental efforts of the products to ensure that they meet the wishes of the customers as well as the periodic review of the potential effects of variables on the environment of our business and on the customer and also to allocate a lot of time to implement the ideas of new products and improve them and the table below shows the statistical results. The second dimension of learning capability has a weighted arithmetic mean 6.07, which is higher than the hypothetical mean and with a standard deviation of 1.93, this reflects the sample agreement on the answer and with a coefficient of variance 0.32. It is clear from Table (1) that the results of the items of this dimension are all

higher than the hypothetical arithmetical mean and they are approximate to each other. This shows the interest of the company in learning capability and in employing effective measures to obtain new information and knowledge. This company also has a capability of transferring this information to knowledge with a possibility of using it in influencing the development of products; the results were not as high as it is shown in the table but they are still good emphasizing the interest in this important dimension in its development work.

As for the third dimension, it has a weighted arithmetical mean 7.10, which is higher than the hypothetical arithmetical mean and the standard deviation 2.16. The sample agreement reflects the answer with a variance coefficient of 0.30. It is clear from the statistics of the sub-items that the sample was very consistent with the items of this dimension. All the arithmetical means were close and good indicating that the leaders of the company deal with a high morale with the completion of the work entrusted to them and believe that their individual contributions are positively reflected on the work of the group and they have the capability to determine the experience and the type of the specialized knowledge associated with their work.

Table (1) Description and diagnosis of subdivisions and paragraphs of dynamic variable based on supply chain management

<b>Descriptive Statistics</b>			
Paragraphs and dimensions of the independent variable	Mean	Std. Deviation	Coefficient variation
We often conduct environmental surveys to identify new jobs	4.73	1.91	0.40
We periodically review the potential impacts of variables in our business environment on the customer	5.64	2.04	0.36
We review product development efforts to ensure that they meet customers' needs	6.03	1.76	0.29
We devote a lot of time to implementing ideas for new products and improving existing products	6.18	2.20	0.36
<b>Sensing capability</b>	<b>5.64</b>	<b>1.98</b>	<b>0.35</b>
We have effective measures to obtain new information and knowledge	6.36	2.19	0.34
We have sufficient procedures to absorb new information and knowledge	6.00	1.94	0.32
We have the ability to transform existing information into new knowledge	5.79	1.85	0.32
We have the ability to use knowledge in new products	5.88	1.87	0.32
We can develop new knowledge that has the potential to influence product development	6.30	1.79	0.28
<b>Learning capability</b>	<b>6.07</b>	<b>1.93</b>	<b>0.32</b>
We are ready to contribute our individual input to the group	7.15	2.49	0.35
We have a global understanding of each other's tasks and responsibilities.	6.55	2.45	0.37
We are fully aware of those who have the expertise and specialized knowledge associated with our work	7.58	2.02	0.27

We tie our business together carefully to meet changing circumstances	7.06	1.85	0.26
Group members run their activities successfully	7.18	1.98	0.28
<b>Integrating capability</b>	<b>7.10</b>	<b>2.16</b>	<b>0.30</b>
We ensure that the outputs of our work are synchronized with the work of others (the departments to which we are associated and associated)	7.06	1.85	0.26
We ensure that resources are appropriately allocated (such as information, time, and reports) within our group.	7.18	1.98	0.28
Group members are assigned tasks commensurate with their knowledge and skills	6.36	1.83	0.29
We are keen to match the experience of the group members with the business requirements	6.67	1.71	0.26
<b>Coordinating capability</b>	<b>6.82</b>	<b>1.84</b>	<b>0.27</b>
<b>Dynamic capabilities based on supply chain management</b>	<b>6.41</b>	<b>1.98</b>	<b>0.31</b>
Valid N (listwise)33			

The last dimension of coordination capability has a weighted arithmetical mean of 6.82, which is a good mathematical mean and with a standard deviation of 1.84 indicating the intensity of the sample agreement on this and with a coefficient of variance 0.27. This dimension is of great importance for clarifying the final form of dynamic capabilities based on supply chain management throughout coordinating actions to be worked out effectively and efficiently. Table (1) shows the sub-items of this dimension and the good arithmetical means approaching little more or less than 7, which is a good result that may explain the company's coordinated actions and synchronization beside the coordination of the allocating process of resources of all kinds within the company. The allocation is also reflected in assigning members of the group tasks in accordance with the nature of their knowledge and skills.

## 6.2 Description and diagnosis of strategic flexibility

Table (2) shows the dimensions and items of the dependent variable (strategic flexibility) and the statistical tools used to analyze the results. The statistical results of this variable show that the weighted arithmetical mean is 6.60, which is higher than the hypothetical arithmetical mean which is 5, and with a standard deviation of 1.77 a matter that shows the intensity of the sample response to the answer and with a coefficient of variance 0.27. This variable included three main dimensions that varied in the number of items that measure the views of the research sample. The first dimension of marketing flexibility included 6 items with a weighted arithmetical mean of 6.82, which is higher than the hypothetical mean and is considered a good deal for the research sample regarding this dimension. When reviewing the arithmetical means of all the items related

to this dimension, it becomes evident that all the arithmetical means were close and with good means reflecting the vision of the company to increase its local markets and increase its market share based on diagnosing the needs of customers and seeking to meet them, even if they were concerned with the global markets and working on providing new products always based on continuous product improvement and with a standard deviation 1.86 reflecting the intensity of the sample response on the items in the table and with a variance coefficient 0.27. The second dimension was production flexibility. Its weighted arithmetical mean reached 6.43, which is higher than the hypothetical mean and falls within the category of good means with a standard deviation 1.7 reflecting the sample agreement on the answer with a coefficient variance 0.27, and it was the least mean for item number seven which is 5.82 and it falls within the medium category and with a standard deviation 1.78 showing the sample agreement on the answer. Therefore, the development department of the company should pay more attention to the manufacturing capability to add value to the production system. The variance coefficient for this dimension is 0.31. It is acceptable and the sample agreement also explains the answer. As for the rest of the dimensions, they were close to each other and fall within the category of the good means. This reflects the orientation of the company towards the commitment to produce various types of products to meet the desire of customers and the possibility of making amendments to them on a continuous basis and also to achieve flexibility on the production capability to meet any order that we always want to modify the capacity of the organization's production in compliance with the requests and the ability to introduce products in a record time to meet the needs of markets and the possibility of exporting their

products to the rest of the countries that depend on them in the completion of their industries.

Table (2) Description and diagnosis of the sub-dimensions and items of the strategic flexibility variable

Descriptive Statistics			
Paragraphs and dimensions of the dependent variable	Mean	Std. Deviation	Coefficient variation
We aim to increase the number of local markets	6.76	1.89	0.28
We seek to increase the market share of the organization	6.97	1.63	0.23
One of our priorities in the organization is to respond quickly to customers' needs	6.94	1.89	0.27
We emphasize the need to respond to all the needs of the customers of the Organization regarding the world markets	6.48	2.14	0.33
Our organization offers new products from time to time	6.64	1.82	0.27
We are constantly improving our products to meet market needs	7.12	1.78	0.25
<b>Marketing flexibility</b>	<b>6.82</b>	<b>1.86</b>	<b>0.27</b>
We commit to producing different kinds of products in our organization	6.73	1.91	0.28
We take care to make adjustments to our products to meet customers' needs	6.58	1.77	0.27
We always wish to adjust the production capacity of the organization in compliance with requests	6.97	1.78	0.25
We insist on introducing new products to the work of our organization	6.39	1.87	0.29
We have a general trend towards developing the production process to meet customers' needs	6.67	1.69	0.25
We have able within the organization to introduce products in record time	6.21	1.81	0.29
The development department in the organization is capable of manufacturing and adding value to the production system	5.82	1.78	0.31
Has the ability to develop its products to meet the needs of existing markets	6.55	1.37	0.21
We have high production capacity serving many industry countries	6.03	1.48	0.25
We have the ability to produce and export to other countries	6.36	1.93	0.30
<b>Production flexibility</b>	<b>6.43</b>	<b>1.74</b>	<b>0.27</b>
The administration emphasizes the importance of the organization in moving to the current world markets	6.33	1.83	0.29
We are interested in diagnosing environmental changes in current markets	6.36	1.45	0.23
The Organization's management adjusts prices according to international requirements	6.67	1.28	0.19
The management of the Organization reduces production costs as required	6.79	1.63	0.24
We always develop new ways of dealing with competitors	6.39	1.77	0.28
The management of the organization insists on developing new technologies to address uncertainty in market requirements	6.33	1.76	0.28
The organization's management invests in information technology to achieve a rapid response to meet market needs	6.67	1.95	0.29
We have the ability to be the first engine in producing new goods to meet the needs of the current market	7.15	1.92	0.27
Senior management in the organization has the ability to diagnose opportunities and threats in the external environment	6.55	1.86	0.28
The organization responds quickly to the wishes of suppliers	6.18	1.59	0.26
<b>Competitive flexibility</b>	<b>6.54</b>	<b>1.70</b>	<b>0.26</b>
<b>Strategically flexibility</b>	<b>6.60</b>	<b>1.77</b>	<b>0.27</b>
Valid N (listwise)33			

The last dimension of competitive flexibility has reached a weighted arithmetical mean of 6.54, which is higher than the hypothetical arithmetical mean falling within

the good category and with a standard deviation 1.70 which reflects the response of the sample on the answer and with a variance coefficient 0.26 confirming the

results mentioned previously and all the arithmetic means of this dimension came close to each other and were within the category of good means. A matter that stresses the company's desire and insistence on the shift from local to global and having its own adaptation in terms of prices and costs and methods of dealing and technology and work systems Information to achieve a good competitive position.

### 6.3. Correlation Analysis

Before testing the hypotheses of the effect of the study, this section presents the correlation tests between the main and sub-variables using Pearson correlation. As shown in Table (3), there is a positive correlation between the dynamic variables and the strategic flexibility, the correlation value is 0.783 \*\* with a significant level (0.01) which is a very high value and approaching (+1), and the value of (Sign.) is (0,000) which is less than (0.05) indicating that the value (t) calculated is greater than the tabular, and after reviewing

all the results of the matrix correlation table below, we note that all the subdivisions of the dynamic capabilities variable are linked to the dependent variable (the strategic flexibility) with a positive correlation and positive values and a significant level of 0.01 indicating a positive correlation between them and all significant values are less than 0.05, meaning that all the calculated values of t are greater than the tabular. The lowest correlation value for learning capability and strategic flexibility was 0.540 \*\* indicating a positive correlation with a high significance. Likewise, the dimensions of the variable of the strategic flexibility are associated with positive values with a significant level of 0.01. The positive correlation between the two and the significant values are all less than 0.05, so that all the calculated values of t are greater than the tabular. The lowest correlation between the flexibility of production and dynamic capability is 0.644 \*\*, which is a positive value that reflects a linear correlation between them and with a mean of 0.01.

Table (3) the correlation matrix between the variables of the study

Correlations						
Correlation		Sensing capability	Learning capability	Integrating capability	Coordinating capability	Dynamic capabilities
Marketing flexibility	Pearson Correlation	.649**	.428*	.709**	.665**	.680**
	Sig. (2-tailed)	.000	.013	.000	.000	.000
	N	33	33	33	33	33
Production flexibility	Pearson Correlation	.588**	.444**	.664**	.429*	.644**
	Sig. (2-tailed)	.000	.010	.000	.013	.000
	N	33	33	33	33	33
Competitive flexibility	Pearson Correlation	.681**	.573**	.784**	.598**	.773**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	33	33	33	33	33
Strategical flexibility	Pearson Correlation	.716**	.540**	.805**	.637**	.783**
	Sig. (2-tailed)	.000	.001	.000	.000	.000
	N	33	33	33	33	33
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

When reviewing the sub-dimensions of the two variables, we find that some values reflect a positive and significant correlation, but weak, such as the correlation

between the learning capability and the marketing flexibility which is 0.428 \*, also the learning capability and the productivity flexibility with a value of 0.444 \*\*.

The same for the coordination capability and productivity flexibility which has a value of 0.429 \*. Thus, all the correlations are significant after the literary reviews have shown their logic before and thus can test the hypotheses of the study and measure the impact between the variables.

#### 6.4. Testing of Hypotheses

In this part of the study, emphasis is placed on testing the hypotheses of the effect of independent variable dimensions which is the dynamic capabilities based on supply chain management on the dimensions of the dependent variable which is the strategic flexibility. Before addressing the main hypothesis test, the independent and dependent variables were tested for first to know the degree of influence, the value of the constant was 2.053, meaning that when the dynamic values are equal to zero, the strategic flexibility is not less than this value. The value of ( $\beta$ ) is (0.7250) meaning that the change of one unit in the dynamic capabilities leads to a change in a portion of this value in the strategic flexibility. The calculated (F) is (49.029) with a significant level of (0.000) and is less than (0.05) meaning that the calculated F is greater than the tabular. This indicates that the dynamic capabilities effect on the strategic flexibility. The value of R Square is 0.613, meaning that 61% of the changes in the strategic flexibility are explained by the variable of the dynamic capabilities and that 39% is due to other factors not included in the regression model. This good result in a high level shows the faith of the research sample (the leaders of the oil distribution company) in the role of dynamic capabilities in their dimensions to achieve the strategic flexibility of the company. When testing the main research hypothesis that "there is a significant relationship between the dimensions of the dynamic capability (Sensing Capability, Learning Capability, Integrating Capability and Coordinating Capability) and the dimensions of flexibility (Marketing Flexibility, Production Flexibility, Competitive Flexibility), it is required to conduct a test of effect of the dimensions of dynamic capabilities combined on each dimension of the strategic flexibility independently, and the test of the dimensions of the independent variable on the first dimension (marketing flexibility) shows that the value of R Square was (0.633) meaning that 63% of the changes in marketing flexibility is an explained variance by the dimensions of the dynamic capabilities and 37% is due to other factors not included in the regression model. The value of ( $\beta$ ) for sensing capability is 0.458). In other words, the change of one unit in this dimension leads to

a change in the value of the marketing flexibility. As for ( $\beta$ ) value in the dimension of Learning capability, it was (-0.321), indicating that a change of one unit in this dimension leads to an opposite change in this value in the marketing flexibility. Also, the value of ( $\beta$ ) for the Integrating capability was (0.293), which is explained by the change in the value of the independent variable within a single unit. Finally, the value of ( $\beta$ ) for the dimension of coordinating capability was (0.352). This value is also explained for the effect. As for F test, it confirms the effect of the model (12.076) at a significant level (0.000) which is less than (0.05) indicating that the calculated F is greater than the tabular, i.e., the dimensions of the dynamic capabilities influence marketing flexibility.

Also, when testing the dimensions of the independent variable on the dimension of production flexibility, the value of R Square is 0.496, this means that approximately 50% of the changes in the marketing flexibility is a variance that is explained by the dimensions of the dynamic capabilities and that 50% is due to other factors not included in the regression model. As for ( $\beta$ ) value for the dimension of sensing capability, it was (0.254) which means that a change of a single unit on this dimension leads to a change of the same value in production flexibility. ( $\beta$ ) value for the dimension of learning capability is (-0.081), which means that a change in a single unit in this dimension leads to an inverse change in the magnitude of this value in productivity flexibility. The value of ( $\beta$ ) for the dimension of integrating capability is (0.489) which is also a value that is explainable of the effect degree. Finally, the value of ( $\beta$ ) of the dimension of coordinating capability is (-0.160) which is also a reversible value of the effect. As for the calculated F test, it confirms the effect of the model as it was (6.895) with a significant level of (0.001), which is less than (0.05) in the sense that the calculated F is larger than the tabular, i.e. the dimensions of the dynamic capabilities affect the flexibility of productivity. Regarding the effect tests of the last dimension of the strategic flexibility (competitive flexibility), the R Square value of the dimensions of the dynamic capabilities variable was 0.657, this means that approximately 66% of the changes in the competitive flexibility is a variance explained by the dimensions of the dynamic capabilities and that 34% is due to other factors not included in the regression model. ( $\beta$ ) value for sensing capability was 0.287, this means that a change of a single unit in this dimension leads to a change in the magnitude of this value in the competitive flexibility.

( $\beta$ ) value for learning capability is (-0.017) in the sense that a change of a single unit in this dimension leads to an inverting change with the same value in this dimension, the same with the value of ( $\beta$ ) for the Integrating Capability dimension which was (0.550), which is an explanatory value for the degree of effect of the change by a single unit in the independent dimension on the dependent. Finally, the value of ( $\beta$ ) for the Coordinating capability is (-0.008) (F), which is a reversing value in effect, and the test of the calculated F confirms the effect of the model which is (13.414) and with a significant level (0.000) which is less than (0.05) in the sense that the calculated F is greater than the tabular, i.e., the dimensions of the dynamic capabilities affect competitive flexibility. It is noted that some of the dimensions involved in the linear test model showed negative results, taking into consideration that when it has gone through an independent test analysis with the dependent variable, it has produced a high effect degree. Even the correlation matrix has shown a high degree of correlation. This is because the other dimensions have a greater degree of influence on the dependent variable than it is inside the interactive model. This requires focusing on the dimensions that have given negative results by the company's management to activate them more and better.

## 7. Conclusions

It is evident from the current paper and the literature reviewed that the concept of dynamic capabilities based on supply chain management proved to be a frequent term in the recent years as it was not only a field of research accepted and spread through scientific journals and research site, but it is a concept that has achieved wide field success and has been studied and applied by organizations and it has been verified to create value and to realize the competitive distinction. The strategic flexibility is defined and demonstrated by strategic researchers as the companies' capabilities to respond to different demands from dynamic competitive environments, for their importance and their expectations in the years to come. The dynamic capabilities based on supply chain management can increase the company's capability to meet the environmental requirements and thus achieve strategic flexibility. After conducting the study on the targeted research sample, it was found that the independent main variables (dynamic capabilities) and the subordinate (strategic flexibility) have received a satisfactory attention from the research sample and the statistical

results showed that there was a strong positive relationship between the two variables, which encouraged the testing of the effective hypotheses, which revealed that there is a significant effect of the dynamic capability model with its four dimensions in the strategic flexibility. However, there is a difference in the degree of influence of the model on the dimensions of the strategic flexibility where the effect in the first place was on the competitive flexibility and then it goes respectively to the marketing flexibility, and the production flexibility, as well as the capabilities of learning and coordination did not have as much effect as that of the capabilities of sensing and integrating, although it has achieved a significant correlation and an individualistic effect for each of them. Accordingly, the company management is urged to take care of the two dimensions using better modes so that better and more beneficial outputs might be attained.

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