

The Impact of Strategic Management Practices on the Corporates' Performance; The Mediating role of the Organizational Agility Focused on the Egyptian Construction Companies

تأثير ممارسات الادارة الاستراتيجية علي أداء الشركات،
ودور مرونة الشركات كوسيط في تلك العلاقة
تم التركيز علي سوق الإنشاءات المصري
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باحث دكتوراه بالاكاديمية العربية للعلوم والتكنولوجيا والنقل البحري
كلية الدراسات العليا
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المخلص

تلعب الادارة الاستراتيجية دور حيوي في تحسين أداء الشركات، وهو ما تم التوصل اليه في الفترات الاخيرة من خلال عدة باحثين في الالونة الاخيرة، وتعتبر الادارة الاستراتيجية من أهم علوم الادارة الحديثة التي تساعد علي تحقيق الشركات لأهدافها الطموحة. علي صعيد آخر توصل أيضاً الباحثون للدور الحيوي الذي تلعبه مرونة الادارة بالشركات "Organizational agility" في مساعدة الشركات في تحقيق أهدافها الاستراتيجية بعيدة المدى. **الهدف الرئيسي من الدراسة:** هي الوصول لدور الادارة الاستراتيجية في تحسين أداء الشركات في قطاع الإنشاءات بالسوق المصري، في ظل دراسة تأثير مرونة الشركات ودورها كوسيط بتلك العلاقة، وتم التركيز علي اختبار جاهزية شركات الانشاءات المصرية لتطبيق الادارة الاستراتيجية مع تطبيق مبادئ مرونة الشركات. بالإضافة إلي أنه تم دراسة شركات تقوم بالفعل بتطبيق

الإدارة الاستراتيجية في تحديد خططها وأهدافها بعيدة المدى ولكن لا تقوم بتطبيق مبادئ مرونة الشركات، وإختبار وجود علاقة ايجابية أو سلبية بين الإدارة الاستراتيجية ومرونة واداء الشركات. الأبحاث السابقة: تم المراجعة والاطلاع علي عدة أبحاث علمية سابقة لعدد من الباحثين الذين تناولوا دور الإدارة الاستراتيجية بمراحلها الأربعة (مرحلة دراسة البيئة الداخلية والخارجية، مرحلة إختيار وتحديد الاستراتيجيات، مرحلة التطبيق، مرحلة التقييم والتحكم) في تحسين أداء الشركات والذي تم قياسه من خلال مؤشرات أداء عديدة منها (مؤشرات مالية، مؤشرات رضا العملاء، مؤشرات تحسين العمليات الداخلية، مؤشرات التعلم والتطوير)، بالإضافة الى قياس درجة استعداد الشركة وتطبيقها لفكر ومبادئ " Organizational Agility" ومنها (سرعة الإدارة في التعامل مع التغيرات الخارجية، مرونة الإدارة في اتخاذ القرار، درجة استجابة الشركة للتغيرات الخارجية). منهجية البحث: تم عمل نموذج للدراسة بناءً علي ما تم دراسته ومراجعته في الابحاث السابقة وتم تحديد المتغيرات والابعاد بعناية، وبناءً علي ذلك تم تحديد الفرضيات وهم أربعة فرضيات تحدد العلاقات بين كلا من المتغيرات المستقل والتابع والوسيط بالتركيز علي قطاع الانشاءات المصري. وتم عمل استبيان يضم كل تلك المتغيرات بالابعاد التي تم تحديدها، وتم تحديد عدد (١٥) شركة كعينة من الشركات المصرية وتوزيعه علي عدد (٣٨٤) شخص من درجات الادارة العليا والمتوسطة بتلك الشركات. النتائج: جاءت نتيجة تحليل البيانات التي تم تجميعها من الاستبيان إيجابياً تماماً، حيث تم اثبات علاقات ايجابية الفروض الأربعة والتأكيد علي أهمية العلاقات بين المتغيرات الثلاث، والذي يتوافق تماماً مع عدة أبحاث سابقة والتي توصلت لنفس النتائج.

كلمات مفتاحية : الادارة الاستراتيجية ، أداء الشركة ، مرونة الادارة بالشركة، قطاع الإنشاءات بالسوق المصري.

The Impact of Strategic Management Practices on the Corporates' Performance; The Mediating role of the Organizational Agility Focused on the Egyptian Construction Companies

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Abstract Purpose: While the strategic management plays a crucial role in enhance the corporates performance and it seize so much attention among business practitioners and academic researchers in the last decades as Strategic Management science become nowadays a vital and significant aspect to achieve the companies long term objectives. On the other hand, the Organizational agility also significantly affect the corporate performance as per numerous researches. Since it is described the ability to adjust operational states efficiently in response to unpredictable and evolving demands (Narasimhan et al., 2006). Organizational agility is critical to improving procedures in terms of infrastructure and management requirements for a complex demand in the global business environment. **Aim and objectives:** The aim of the study is to find out the impact and the relationships between strategic management (SM) and business performance (FP) in the Egyptian construction sector, while testing the impact of using Organizational Agility principle as a

mediator. The study managed to examine whether the Egyptian construction sector is ready to implement the strategic management practices applying the principles of Organizational Agility. More attention will be given to companies that have applied the SM theories and their interest in the application of Organizational Agility in the Egyptian construction sector.

Hypotheses: Based on empirical literature, the model expressed the relationship of strategic management practices consisting of four basic phases that include (environmental scanning, strategy formulation, strategy implementation, and evaluation and control) and related to company performance, four perspectives that measure the organization and the business unit or departmental success after finance; Customer; internal operations; Human Resource Systems & Development (learning and growth) and for the financial indicator, the study focused on only two dimensions (profitability metrics, revenue growth) and the customer indicator, the study focused on customer satisfaction and the internal process that the study selected to improve Internal Process Indicator . In terms of context, the main concept of the model is to examine the role of Organizational Agility, which include four main dimensions (The speed level, The flexibility level, The responsiveness level), and finally the competence level. **Design/methodology/approach:** The study proposes a research model built on the basis of extensive research and a fully constructive literature review that simulates the

variables and the relationships between all these variables. Based on this model, a research hypothesis is established, which focus on the Egyptian Construction and relied on primary data which planned to be obtained by using questionnaires and face to face structured interviews administered to well selected sample from the middle and upper management where they are the main target group of this study as they are very familiar and have solid experience in studying the subject. The sample size was carefully calculated to represent the population reached to 323,004 employees. Therefore, we selected a sample of approximately 384 participants from fourteen large companies with a confidence level (95%) and an error rate (5%). **Results:** Aligned with the study objective, the analysis has managed to present a comprehensive framework that includes very important relevant aspects of the strategic management aspects and shows the direct relationship of the strategic management and the company performance in mediating the Organization Agility. Most of the hypotheses were confirmed based on the survey analysis.

Keywords: *Strategic Management, Firm's Performance, Corporate Agility, Egyptian Construction Sector*

Chapter One: Introduction

1.1 Introduction:

In 2018, the construction industry in Egypt is one of the driving industries in the world economy. The construction Industry represents almost 5% of the Egyptian GDP and employs about 8% of the Egyptian working force (Ahmed Bahaaeldin - Scientific Journal of October 6 University).

The construction industry grew by an estimated 8% in real terms in 2021, compared to growth of 3% in 2020. The industry's output in 2021 was supported by a recovery in the country's economic conditions and ongoing construction of large infrastructure projects, such as the New Administrative Capital (NAC), New Alamein and New Galala. As a result, the Egyptian construction industry grew by 8.5% year on year (YoY) in the first three quarters of 2021, according to the Central Bank of Egypt (CBE), and positive growth momentum is expected to be maintained in the coming quarters, supported by a rapid vaccination program and the subsequent relaxation of restrictions.

The government allocated EGP245 billion (\$15.6 billion) towards the transport sector, including roads, bridges and river ports, as well as projects under the National Authority for Tunnels (DUBLIN--(BUSINESS WIRE -2022).

Egypt's construction industry is expected to grow by 6.8 percent year-on-year in 2023, with an average annual growth rate of 7.4 percent predicted between 2024 and 2027, according to a report by Fitch Solutions (Ahram Online , Wednesday 19 Apr 2023). The expected growth would still be lower than the 9.9 percent recorded between 2015 and 2019 before the pandemic.

Despite the challenges such as Egypt's increased debt, high inflation, currency depreciation, and rising energy and material costs, large-scale infrastructure projects, such as the Ain-Sokhna-Marsa Matrouh High-Speed Rail project, will provide support for growth. In addition, the government's privatization drive is expected to increase private sector participation in the infrastructure sector and improve transparency and bureaucracy, drawing in foreign and local investment, Fitch noted.

The rating agency maintained that Saudi and UAE-based investors are expected to be key strategic partners for the Egyptian government during the divestment program, creating significant opportunities for contractors and infrastructure companies from those markets.

The Fitch report noted that the construction market in Egypt is currently benefiting from strong economic growth, ongoing political and macroeconomic stability and a young and growing population.

Earlier in April 2023, data by the Central Agency for Public Mobilization and Statistics showed that 246,000 residential units were built in Egypt during FY2021/2022, a 36.65 percent decline over the previous year

1.2 Research Problem:

In addition to above mentioned challenges, there are other number of problems and challenges that plague the construction industry namely; poor staffing and management competencies at all levels of the construction firm, a weak approach to the use of strategic management practices within the holistic mission of the construction firms, weak access to finance and poor planning of monies, absence of a unified legal and regulatory framework for all contractors

Some of the major concerns within an internal perspective is the deployment and use of technology platforms to improve efficiency levels, cohesion and fluidity of various teams and professionals and the adoption of management strategies that focus on the core pillars of strategic management namely; strategic planning, strategic choice and strategic implementation.

For the last decade many of corporates reveal that there is a massive importance of the application of the Strategic Management processes and it direct impact on the overall company's performance, many of the concepts and techniques

that deal with strategic management have been developed and used successfully by business corporations such as General Electric and the Boston Consulting Group. Over time, business practitioners and academic researchers have expanded and refined these concepts.

1.3 Research Objectives:

The main objective of this study is to investigate and test the effects and relationships of the following variables:

1. To examine the relationship between the Strategic Management Practices and effective positive the Company's Performance.
2. To study the impact of the Strategic Management Processes on the Organizational Agility.
3. To investigate The Organizational Agility impact on the company's performance.

To examine The Organizational Agility Mediation effect on the relationship between the Strategic Management Practices and the Firms' Performance

1.4 Research Gap:

The study of strategic management has drawn so much attention among business practitioners and academic researchers

in the last two decades as globalization came fully into limelight. As more industries become global, strategic management now becomes an increasingly important tool to keep track of international developments and position the firm for long term competitive advantage.

In developed countries as well as in developing ones, much has been written on strategic management in form of books. However, Egypt in particular, there are few empirical studies conducted to investigate the relationship between strategic management and firm performance while applying the tool of Corporate's Agility in the Egyptian construction sector. Much less attention has been paid to strategic management practices, and this lack of attention provides an opportunity for these theoretical contributions. This necessitated the study.

1.5 Research Significance:

This research makes a significant contribution to the academic literature and the practice community as well. However, the study has a significant contribution to the practice community of the Egyptian Construction sector in several ways:

First: The study is directly aligning with the huge changes and circumstances in the Egyptian Construction Industry. Which is could be a real add value and gaudiness of the companies to cop up with such impressive change.

Second: The study could contribute to present and measure the crucial role of implanting the strategic management practices for achieve a high companies' performance, particularly to the companies which till now didn't have a strategic plan.

Third: The study determines the impact of applying the Agility Principles while design and implement the strategic management practices for the first time in the Egyptian Construction sector.

1.6 Research Questions:

Based on the research objectives, the researcher formulates the following main questions:

1. What are the impact of implementing the strategic management practices on the company's performance?
2. Are the Strategic Management processes have effective role in the Corporate Agility?
3. What is the role of the Corporate Agility on enhancing the company's performance?
4. Are the Corporate Agility concepts have significant role in relationship between the Strategic Management processes and company's performance?

1.7 Research Scope:

The researcher focuses on measuring the impact of Organizational Agility on the relationship of the strategic management processes and firms' performance, focused on the Egyptian construction sector' companies.

Chapter Two: Theoretical background and the literature Review:

2.1 Strategic management:

2.1.1 Strategic Management Definitions:

Strategic management is long-term oriented, directed towards future growth potentials, substantial, holistic, and predominantly associated with the highest management level which determines the vision, mission, and culture of the enterprise (Pillania, 2008). It is an approach of specifying objectives of the organization, develop plan and policy to achieve those objectives, allocate resources and evaluate the strategy. According to David (2003), strategic management is the combination of strategy formulation, implementation, and evaluation. Strategic management is simply a set of managerial decisions and actions that result in the formulation and implementation of the strategy to achieve organization's objectives (David & David, 2003). Thompson, Strickland, & Gamble (2007), defined strategic management as a process where managers establish an organization's long-term direction, set

performance objectives, develop strategies to achieve those objectives in the light of relevant internal and external circumstances, and execute chosen action plans (Thompson, Strickland, & Gamble, 2007). Strategic management consist of analysis, decisions, and actions and organization carry out to create sustainable advantages (Dess, Lumpkin, & Eisner, 2003).

How strategic management is implemented in an SME organization define that firm's strategic management practices. The strategic management process is continuous and dynamic and a change in one component can necessitate a change in the entire strategy (Fink & Ploder, 2009).

2.1.2 Strategic management Practices:

Numerous studies have been developed to explore the concept of strategic management in organizations. Researchers have built their own framework to answer the fundamental question in strategic management which is how to create and sustain competitive advantage by adopting two mainstream paradigms in strategic management - Thomas Gebrecherkos 2020.

Strategic management is the process that encompasses strategic planning, implementation and evaluation (Thomson and Strickland, 2014). On the other hand, they outlined five tasks in the strategic management process. These are as follows:

- Developing a strategic vision and mission.
- Setting objectives,
- Crafting a strategy,
- Implementing the strategy and
- Evaluating performance, initiating corrective adjustments.

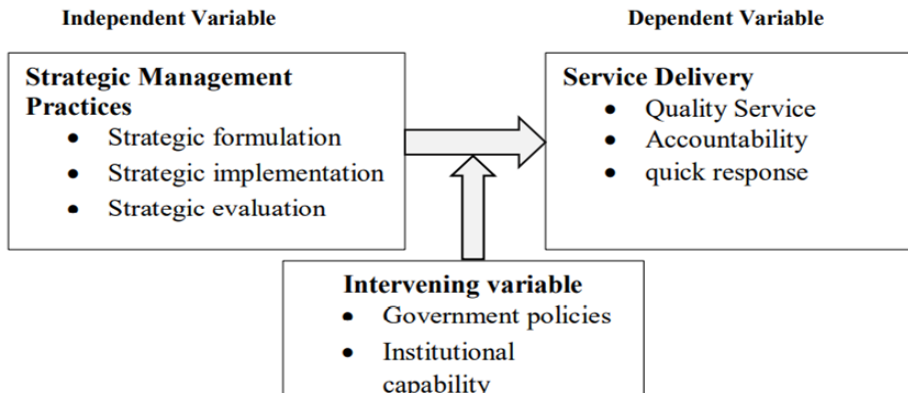
2.1.3 Strategic Management Benefits / Importance:

The benefits of strategic management cannot be overstated, especially when a company applies the approach in the right situation. According to Thompson and Strickland (2007), Wheelen and Hunger (2007), Dauda et al. (2010), Pearce and Robinson (2013) and Wheelen et al. (2014) include the benefits:

- i. Clearer sense of strategic vision for the organization.
- ii. More focus on what is strategically important.
- iii. Make managers and organizational members more alert to new opportunities and threats in a rapidly changing environment.
- iv. Helps to overcome risks and uncertainties and thus contributes to the success of the organization.
- v. Fostering the development of a constantly evolving business model that brings sustained profitability to the company.

2.1.4 Previous Studies / Theoretical Models (Critical Analysis):

According to (Jeanne dArc, 2021), he studied the impact of strategic management practices on the service delivery of the Rwanda public entity and the National Land Centre. The researcher drew on qualitative data from the literature as well as quantitative data from the field, primary data and other reviews of secondary data. The target group; consisted of 116 staff in various categories, including 6 officers, 46 members of the NLC, 24 district country officers and 30 sector country officers. The researcher developed a conceptual framework that includes strategic management practices as independent variables and performance as dependent. And other factors such as government policy and the ability of the institution and stakeholders play a key role in enabling the linkage between the independent and dependent variables as a moderator. Such a model is consistent with the model proposed in the study in the strategic management practices while the researcher uses the strategic formulation, strategic implementation and strategic evaluation as indicators and dimensions of the strategic management practices according to the figure below:



The results show that the majority of respondents indicated that a performance goal is the implementation strategy used in NLC. Strategic assessment played the least role in the positive performance of the National Land Centre. And it concludes that there is a significant relationship between policy formulation, implementation, evaluation and service delivery at the National Land Centre. And he recommends that the National Land Center should focus more on the importance of policy formulation, implementation and evaluation. (Mustafa Colak, 2020) examined the relationship of strategic planning practices to company performance (The harder companies practice strategic management, the better their performance and competitiveness will be). Based on his literature review, the author developed seven hypotheses (use of strategic planning tools, intensity of strategic planning, scope of strategic plan implementation,

direction of strategic plan implementation, accountability, strategic control) and their impact on business performance. And business performance affects business competitiveness. The author relied on a definitive population list that included 210 semi-public companies in Abu Dhabi and they were all attacked. 182 completed questionnaires were then collected and included in the analysis, which corresponds to a response rate of 86.6%. Responding companies belong to a range of industries that may be representative of semi-public companies in Abu Dhabi. 15 companies (8%) had fewer than 100 employees, 36 companies (20%) had 100,249 employees, 31 companies (17%) had 250,499 employees, 31 companies (17%) had 500,999 employees and 69 companies (38%) had 1,000 employees or more. The results Surprisingly, it turned out that the practice of strategic planning (use of strategic planning tools) does not have a positive correlation with company performance. This finding is inconsistent with their predictions and contradicts several studies that have argued that strategic planning practice positively impacts organizational performance.

2.2 Corporates' Performance:

2.2.1 Firm's Performance Definition:

Business performance has long been studied by academia to measure the health of a business. The reliability and validity of

performance measurements are critical to empirical studies. From an initial reliance on purely financial perspectives, business performance measurement has gradually expanded to include multiple dimensions. (Venkatraman and Ramanujam, 1986) suggested that company performance should be measured in terms of financial and operational aspects. Financial performance is measured using indicators such as sales growth, earnings per share, profitability, efficiency and effectiveness, which are reflected in return on investments, return on sales and return on equity (Taouab & Issor, 2019). However, operational (or non-financial) performance emphasizes indicator factors such as product quality and productivity, market share and marketing effectiveness (Demirbag et al., 2006).

Business performance or company performance is part of an organization's effectiveness, which includes operational and financial results. Defining organizational performance in the 21st century decade focuses on how organizations use resources efficiently to continually improve skills and abilities to achieve organizational goals (Taouab & Issor, 2019).

Another statement by (Lebans and Euske, 2006) where there are three concepts of company performance, namely (1) information on the degree of achievement of goals and results based on the amount of information from financial and non-financial indicators (2) requires the Evaluation and interpretation

(3) using a model causal to illustrate the results in the future as a result of current actions (4) depending on the role of the people involved in the company's performance, a different understanding arises (5) it is necessary the concept of basic characteristics for each area of responsibility to know (6) the need to report company performance at a level so that the results can be measured (Taouab & Issor, 2019). (Seminomas, 2008) affirms that a company performs when it can maximize time effectively and efficiently (Taouab & Issor, 2019).

Creating value simply means generating sufficient profit while satisfying the needs of diversified stakeholders (Burhan & Ramanti, 2012). A company's ability to manage its financial and non-financial activities is very crucial to its survival (Taouab & Issor, 2019). When this is achieved at a significant level in a company, it is said to be sustainable.

Financial metrics are typically lagging performance metrics, while non-financial metrics are leading performance metrics that provide insight into future performance (Briggs, et al., 2006; Marie, et al., 2014; Ahmad and Sabri, 2016). Non-financial or subjective performance indicators include employee satisfaction (employee turnover, investment in employee development and training, and organizational climate), customer satisfaction (number of complaints, repeat purchase rate, customer loyalty), environmental performance (recycling, material consumption,

energy consumption). , pollution and waste) and social performance (minority employment, contribution to social causes) (Selvam, et al., 2016; Taouab and Issor, 2019).

Strategic Performance Measurement Systems (SPMS) are used in a variety of organizations to support performance planning, measurement and control. SPMS were designed to present managers with financial and non-financial metrics from different perspectives, which combined provide a way to translate strategies into a coherent set of performance metrics (Chenhall, 2005). Financial metrics assess the short-term impact of management decisions in areas such as revenue growth, asset utilization, and cash flows (Kaplan & Norton, 2001, Rappaport, 2005), while non-financial metrics capture variables likely to affect future financial performance, such as customer service and quality products. Company performance refers to a company's overall result in effectively achieving a goal (Lahiri & others, 2009).

2.2.2 Firm's Performance Aspects:

With regard to subjective performance measurement, performance information is provided in non-monetary terms, such as sales volume, market share, customer satisfaction, cost reduction, employee turnover and new product development, relevant to survive in a competitive environment (Schaap, 2006). Lema, Cortes, Lizano and Dan Ochovo (2012) argue that by

subjective measurement, firm managers or owners are willing to give their perceptions about business performance, including their perception in regards to the sensitive or confidential information needed by the firms to survive in a competitive and rapidly changing environment. Parnnel (2012) presents argument that the power of non-financial actions lies on their ability to provide insight into business processes, which in the long run is a better predictor of the future business performances. By understanding the empirical evidence, the researcher used subjective performance measurement for this study since it is difficult to get an objective performance measurement through financial statements. Accordingly, the subjective measure of performance is; profit in a subjective manner, market share, sales volume in terms output, customer satisfaction and reduction of waste. More specifically the following terms are used as a business performance indicator.

i. Profit

Profit is the revenue remaining after all costs are paid (Amadeo, 2019). These costs include labor, materials, interest on debt, and taxes. Profit is usually used when describing business activity. But everyone with an income has profit. It's what's left over after paying the bills or costs. Profit is the reward to business owners for investing. In

small companies, it's paid directly as income. In corporations, it's often paid in the form of dividends to shareholders. When expenses are higher than revenue it leads to a loss. If a company suffers losses for too long, it goes bankrupt.

ii. Customer Satisfaction

Wikipedia (n. d) it is a measure of how products and services supplied by a company meet or surpass customer expectation. Customer satisfaction is defined as a measurement that determines how happy customers are with a company's products, services, and capabilities. Customer satisfaction information, including surveys and ratings, can help a company determine how to best improve or changes its products and services.

An organization's main focus must be to satisfy its customers. This applies to industrial firms, retail and wholesale businesses, government bodies, service companies, non-profit organizations, and every subgroup within an organization. There are two important questions to ask when establishing customer satisfaction, which are who are the customers? And What does it take to satisfy them?.

2.2.3 Firm's Performance Benefits / Importance:

The purpose of measuring performance is not only to know how a company is performing, but also to enable it to perform better. The ultimate goal of implementing a performance

measurement system is to improve an organization's performance so that it can better serve its customers, employees, owners, and other stakeholders (Johnson, 2003). Performance measurement generates data that tells users where the business is, how it's doing, and where it's going. A performance measurement system enables a company to plan, measure and control its performance according to a predefined strategy (Okwo & Marire, 2012).

Researchers claim that there has been a paradigm shift from the traditional approach of measuring financial performance to one that integrates both financial and non-financial measures (Atkinson & Kaplan, 2003; Hoque & James, 2000; Malina & Selto, 2001; Simons, 2000). Organizations have a variety of goals and objectives and therefore a single measurement, or even multiple measurements of the same type, is less likely to effectively assess organizational progress towards all of these goals and objectives. A primary goal is to be financially solvent. Because solvency is determined by the relationship between cash inflows and outflows, cash flow has often been used as a measure of performance. If the organization is for-profit, its goal is to provide shareholders with satisfactory returns. Accordingly, an income measurement is used by virtually all companies to assess performance.

2.2.4 Previous Studies / Theoretical Model (Critical Analysis):

(Duc Tai, 2021) measured the internal factors affecting corporate performance of food and beverage (F&B) companies listed on the Hanoi Stock Exchange (HNX) in Vietnam. The researcher collected the data from 15 F&B companies listed on the HNX from 2015 to 2019 and relied on both qualitative and quantitative data. The secondary data is derived from the audited financial statements of 15 F&B firms listed on HNX and operating through the end of fiscal year 2019, in addition to previous studies and the opinions of interviewed experts. The researcher proposed the variables such as the ratio of short-term debt to total liabilities, the impact of total assets on ROA and ROE, the ratio of debt to total assets on ROA. The results show that the ratio of short-term debt to total debt of the capital structure factor has a negative impact on ROA, ROE. The observed variable leverage of the capital structure factor has a negative impact on the ROA. Therefore, to avoid the diversified, scattered and ineffective investments, the researcher recommends that the business portfolio must be focused on projects with potential and guaranteed investment capital.

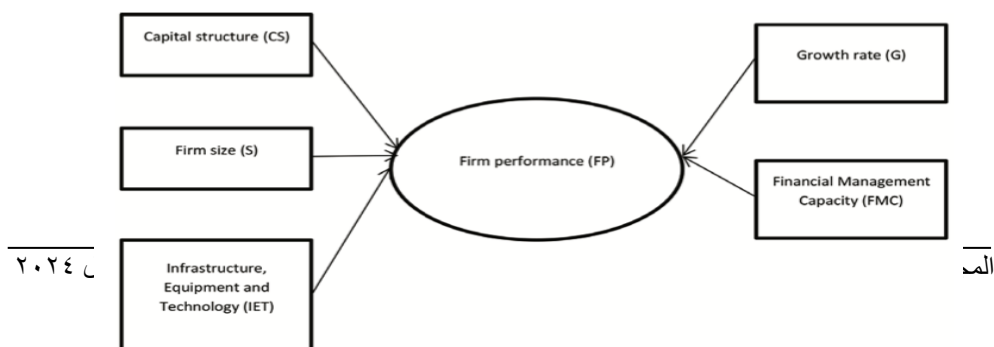


Figure 2: Research Model

(Cuong Vu Hung, 2021) examined the impact of firm size on the performance of Vietnamese private firms. The researcher used the data from the annual business survey from 2009 to 2018 for the secondary data to test the impact of business size (growth rate, total assets and total employment) on the performance of Vietnamese private companies. According to the results of the quantitative model, total assets are the largest factor in determining company performance, followed by total work and growth rate. The model was proposed as follows:

$$Y_{i,j,t} = C_t f \cdot Size_{i,j,t}, X_{i,j,t}, (1)$$

where i, j, t are the company, province, and year, respectively; Y denotes the performance of a Vietnamese private company, is representative of profit after tax; C is a constant; Size describes company size, a proxy for growth rate (Size_Gr) measured by growth in company revenue, total assets (Size_A), total work (Size_L); X are the control variables including company age (A), which is measured by the number of years in

operation since its inception, and the provincial competition index (PCI). The results underscore the problem of Vietnamese private enterprise development in terms of scale, although their number is increasing as enterprise scale is decreasing (the proportion of micro and small enterprises is increasing, but the proportion of medium and large enterprises is decreasing).

2.3 Organizational Agility:

2.3.1 Organizational Agility Definition:

Organizational agility is described as the ability to adjust operational states efficiently in response to unpredictable and evolving demands (Narasimhan et al., 2006). Organizational agility is critical to improving procedures in terms of infrastructure and management requirements for a complex demand in the global business environment in healthcare organizations.

Organizational agility is the ability to handle changes that often happen unexpectedly in the business environment through quick and innovative responses by taking advantage of the changes as an opportunity to grow and thrive (Lu & Ramamurthy, 2011). Organizational agility counts as a main competency for organizations that experience persistent changes in the business environment and high competitive pressure (Panda & Rath, 2016). The importance of organizational agility also applies to MSMEs because they operate in a turbulent and

dynamic business environment, signified with the changes in customer's needs, increased competition, greater flexibility, and the rapid development of innovative products/services (Parida, Oghazi, & Cedergren, 2016).

Agility refers to a system's ability to meet rapidly changing needs and other external stimuli cost-effectively without compromising the quality of its products and services (Ganguly et al., 2009). It allows firms to replace existing processes by applying new procedures and resources, and it is instrumental in redesigning organizational structures based on new conditions (Troise, Corvello, Ghobadian, and O'Regan, 2022; Ferraris et al., 2022; Darvishmotevali et al., 2020). Meanwhile, organizational agility (OA) is defined as the organization's ability to identify unexpected changes in the environment and respond swiftly and efficiently by utilizing and reconfiguring internal resources, thus gaining a competitive advantage in the process (Zitkienė and Deksnys, 2018). From an NIT perspective, agility can be explained by emphasizing the concept of cognitive factors (DiMaggio, 1991). Specifically, agile institutions should focus on the representation, use, and development of the content and structure of knowledge structures both to address value commitments and facilitate the capacity for action in changing environments (Walsh, 1995).

Menon and Suresh (2021) expanded the notion of organizational agility in the context of ICT adoption. They identified eight factors that could influence organizational agility:

- 1- The ability to sense the environment;
- 2- The organizational structure;
- 3- The adoption of ICT;
- 4- Organizational learning;
- 5- Human resource strategies;
- 6- Leadership;
- 7- Willingness to change;
- 8- Collaboration with stakeholders.

On the one hand, digital transformation has improved organizational agility, as digitization leads to new occupational profiles and specific stress on the organizational fabric and agility (Del Giudice et al., 2018; Jesse, 2018). Ghasemaghaei et al. (2017) argued that, by utilizing data analytics, firms could enhance their agility by achieving greater levels of fit between analytical tools, data, employees' capabilities, and firm tasks. On the other hand, technology competencies and digital transformation (Rane et al., 2019; Nguyen et al., 2020) and e-commerce capabilities (Li et al., 2020) are vital for improving organizational agility.

2.3.2 Organizational Agility Aspects:

In the last two decades, organizational theorists have also explicitly considered the role of agile performance in enabling firms to successfully adapt to fast-changing and unpredictably disruptive environments (Appelbaum et al., 2017). More recently, researchers have evoked agility to describe and explain organizational responses in contexts as diverse as information systems (Najrani, 2016), market orientation (Borshalina, 2015), and strategic alignment (Hassna & Lowry, 2018).

In recent years, changes in the market and business environment have become more important than ever. The internal changes in the organizational environment such as the increasing domination of the Internet in the business world, the Internet of things, fast emerging events such as Industry 4.0, rapid technological developments, changes in the tastes of customers, the speed of information transfer and complex employee management force businesses to transform. It has caused unprecedented pressure on businesses to quickly adapt and respond to changes in their work environments (Nejatian et al., 2019).

There is a consensus on the importance of strategic agility in the light of complex management challenges such as globalization, dynamic environment, speed of innovation, mergers and acquisitions. The struggle to cope with increased environmental uncertainties including various practices and techniques commonly used in different sectors, has consequently, required a revision of both strategic decision making processes and their nature (Vecchiato, 2015).

Strategic agility is more about the ability to think and act differently to bring about new business model innovations (Doz and Kosonen, 2017, p. 7).

In its most general sense, strategic agility can be defined as competitive capabilities that enable organizations to cope with changing environments by constantly perceiving, detecting and capturing with strategic moves and changing organizational configuration (Nejatian et al., 2019).

Agility in business research is a new generation concept and its semantical use varies according to the research area. Studies on agility can generally be divided into two groups. In the first group, agility is considered as a generic capability that allows the company to adapt its operations quickly to rapidly changing market conditions and

sudden changes in consumer needs (Braunscheidel and Suresh, 2009). In the second group of studies, agility is considered not only as a capability but also as an integrated strategy, paradigm, system or management practice built on multidimensional skills (Dyer and Shafer, 1998). Accordingly, an agile firm should be flexible in its operations and be agile in reorganizing its strategy in a manner that is sensitive and adaptive to environmental changes.

Strategic agility requires inventing new business models and new categories rather than rearranging old products and categories. In the context of the concept of strategic agility, researchers have stated that factors such as developing strategies to cope with discontinuities and disruptions, finding new ways to manage business transformations and renewals, developing dynamic capabilities, creating imitation skills, providing a high level of organizational flexibility and convenience as well as developments in learning are important (Weber and Tarba, 2014).

2.3.3 Organizational Agility Importance:

Agile organizations have the ability to initiate continuous renewal, which includes adapting existing competencies to a constantly changing environment and simultaneously reconfiguring themselves to survive and develop for a long time

(Agarwal and Helfat, 2009). Strategic agility is one of the key determinants of a firm's success in a chaotic environment in which new markets emerge, crash, divide, evolve and die. Strategic agility is to be flexible in understanding new developments, to constantly adjust the company's strategic direction and to develop innovative methods to create value (Teece, 2007; Vecchiato, 2015; Weber and Tarba, 2014).

Discontinuity and disruptions of strategies often result in changes to business models. Contrarily, effective companies develop business models that naturally become increasingly stable and consequently solidified over time. The solution to this contradictory situation can be facilitated with the help of core meta-skills (strategic sensitivity, leadership cohesion and resource fluidity) developed to make an organization more agile. Many companies fail not because they do something wrong or incomplete, but because they continue to do things that have been right for a long time and are victim to the rigidity of business models (Doz and Kosonen, 2010). Therefore, agile organizations are those who show high flexibility. In addition, speed is needed to detect environmental changes and respond adequately.

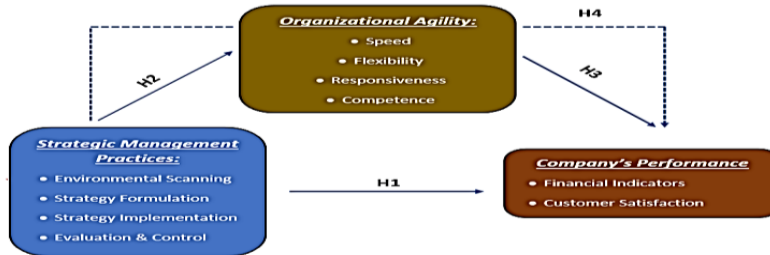
Research Conceptual Model:

Based on empirical literature, the model expressed the relationship of strategic management practices consisting of four basic phases comprising (environmental scanning, strategy formulation, strategy implementation and evaluation and control) based on the previous studies mentioned in detail in the literature review as z (Jeanne dArc, 2021) considered the strategic formulation, strategic implementation and strategic evaluation as the main indicators, and (Nabil Tarifi, 2021) developed the theoretical framework based on elements of the strategic plan, including the mission and vision, the core values , SWOT, and organizational goals, however I prefer to present such dimensions in the Environmental Scanning Process and to compare them with the study (Mohammad Ali, 2019) how he strategic management (strategy formulation, implementation and evaluation) and other empirical research works suggest g, which are included in the appendix Literary review .

Hypothesis:

- H1: The Strategic Management Practices have a direct and effective positive impact on the Company's Performance.
- H2: The Strategic Management Processes have a direct positive impact on the Organizational Agility.
- H3: The Organizational Agility has a positive impact on the company's performance.
- H4: The Organizational Agility Mediate the relationship between the Strategic Management Practices and the Firms' Performance.

Research Proposed Conceptual Model



Chapter Three: Research Methodology

Population:

The study was conducted in Egypt and focused on the Egyptian construction sector. One of the first famous and independent construction company was established in 1955 was Osman Ahmed Osman company (Arab Contractors), It was nationalized in 1961 following the Egyptian revolution of 1952. It has been involved in the construction of several government buildings in Egypt.

Given the strategic importance of the Department's existence as a political body that is reshaping overall construction strategies to meet the needs of the country at this stage. At the top of the list of priorities is the supply of local market needs for residential units due to rise population and strategic private and nation projects, as well as the contribution to achieving the targeted growth rates of the national economy.

Contracting projects are considered among the most reliable projects in implementing major construction projects in Egypt, establishing cities, residential units, and commercial institutions, and other projects that contribute to the process of construction and reconstruction in Egypt.

In our research, we will deal with major Egyptian contracting companies in the first categories of the Federation's classification, as these companies are distinguished by their ability to apply modern strategies and their possession of a large work record from previous projects, in addition to many other qualifications required to work in international projects, through which one can obtain accurate results in our research.

In the following lines, there is a list of giant contracting companies in Egypt as per Forbes List 2022:

- Talaat Mostafa Holding Group for Real Estate and Construction – Assets 7.50B\$
- Orascom Construction PLC
- Hassan Allam Hold SAE
- Dar Al-Handasah Project
- Al-Durrah Company
- El-Sewedy Electrical Company
- Arab Contractor CompaThe Arab Contractors Osman Ahmed Osman & Company
- Cairo Investment and Real Estate Development (SIRA)
- Memaar Al Morshedy contracting companies
- Khalda Construction Company
- Emar Masr Company
- Petrojet Company
- Palm Hills Company
- Sodic Company
- El- Marasem Development Company.

Sample Size:

A sampling technique was used to select respondents who are managers of different departments as they are the top/senior management making strategic decisions and coordinating resources. Managers came from multiple departments including Strategic Management, Construction Management, Contract Department, Human Resources, Finance, Quality Assurance, Engineering, Internal Audit, and Procurement departments.

The research focused on the Egyptian Construction companies, which are considered to have a large geographically dispersed population. The researcher carefully follows the following steps to define the sample size:

Step #1: Define the population: The Egyptian market currently includes more than 30 thousand local contracting companies, operating under the umbrella of the Egyptian Federation for Construction and Building Contractors in 7 approved classifications that are compatible with the financial solvency and technical capabilities of each entity with a total of **3,874,900** employees.

Egypt Labor Force: Employed: Construction data was reported at 3,874,900 Person in 2022. This records an increase from the previous number of 3,738,400 Person for 2021. Egypt Labor Force: Employed: Construction data is updated yearly, averaging 2,794.800 Person from Dec 2006 to 2022, with 17 observations, Construction data remains active status in CEIC and is reported by Central Agency for Public Mobilization and Statistics. The data is categorized under Global Database's Egypt – Table EG.G012: Labor Force: Ending December.

Selection of the sample: The study focused on a specific number of companies based on the Market, assets values and number of employees sampling technique, therefore the study focused on (15) companies as follows:

S	Company Name	Number of Employees
1	Talaat Mostafa	100,000
2	Orascom Construction	40,000
3	Hassan Allam Hold Company	10,000
4	Dar Al-Handasah Project	350
5	Al-Durrah Company	7,500
6	El-Sewedy Electrical	15,000
7	Arab Contractor	68,583
8	Cairo Investment	5,800
9	Memaar Al Morshedy	25,500
10	Khalda Company	5,000
11	Emar Masr Company	500
12	Petrojet Company	36,521
13	Palm Hills Company	5,000
14	Sodic Company	1,000
15	El- Marasem Development	2,250
	Total	323,004

Based on the selected 15 top construction companies, the total number of employees is (323,004), which corresponds to my research population, particularly since our survey focused on middle and top management levels (the managerial levels). Therefore, the sample size represents the population, and is calculated using the following: N (Population Size) = 323,004, Confidence Level is 95%, Confidence interval is 5%, Z score is 1.96, the sample size will be 384 (Note: The sample size identified using sample calculator).

Data Collection Procedure:

The study collects primary data through the administration of a closed-ended structured questionnaire, the survey questionnaires each consist of three sections and were used to collect data from the sample of Egyptian construction companies: Section A consists of four aspects of strategic management; Environment scanning, strategy formulation, strategy implementation, and control and evaluation adapted to the developed questionnaires NYARIKI, 2013 and Kamasak, 2008. To measure organizational performance in Section B, this study uses the scale of previous studies with two main indicators, financial and non-financial namely financial indicators and non-financial indicators. Measure organizational agility in Section C was based on Dimension adapted from scale (Supasith, 2016).

Chapter Four: Data Analysis, Results (Findings):

This chapter presents the data analysis part of this thesis. The analysis of this thesis was done using the statistical package for social sciences (SPSS V29) for both descriptive and inferential statistics, and (SmartPLS 3.2.9) for SEM-PLS modeling. Section one provides the respondents' demographics. A preliminary data analysis is given in section two; this includes screening for missing data, finding outliers, testing data normality, and investigating common method bias. Finally, in section three, the application of PLS-SEM is presented in seven stages: specifying the structural model, specifying the measurement model, data collection and examination, path model estimation, assessing the measurement model, assessing the structural model, and interpretation of the results.

4.1 Respondents' Demographics

The demographic characteristics of respondents were reported in table 4.1 associated with some graphs that can be found in appendix B. Between the respondents, there 70% were males, and 30% were females. Moreover, less than 1% of the respondents aged 21 or younger, 16% aged between 22 - 35 years old, 32% aged between 36 - 52 years old, 49% aged between 53 - 59 years old, and 3% aged 60 or older. Regarding the name of the company, 42% were from PETROJET, 20% from El- Marasem, 16% from El-Sewedy, almost 3% from Dar Al-Handasah, Hassan Allam, Sodic, and The Arab

Contractors Osman Ahmed, and 19% from other companies. 6% of the organizations have total employee headcount from 100 to 101, 6% have total employee headcount from 1001 to 5000, 4% have total employee headcount from 500 to 1000, 24% have total employee headcount from 5001 to 10000, and 61% have total employee headcount from More than 10000. Finally, almost 1% of the organizations have been in business for less than one year, 1% have been in business between 1 – 4 years, 3% have been in business between 5 – 9 years, 89% have been in business between 10 – 50 Years, and 6% have been in business Older than 50 years.

Table 4.1: Demographic characteristics

Variable	Category	N	%
What is your gender?	<i>Female</i>	90	30.0%
	<i>Male</i>	210	70.0%
What is your age?	<i>21 or younger</i>	1	0.3%
	<i>22 to 35</i>	47	15.7%
	<i>36 to 52</i>	96	32.0%
	<i>53 to 59</i>	146	48.7%
	<i>60 or older</i>	10	3.3%
What is your company Name/Structure?	<i>Dar Al-Handasah</i>	4	1.3%
	<i>El- Marasem</i>	59	19.6%
	<i>El-Sewedy</i>	48	15.9%
	<i>Hassan Allam</i>	4	1.3%
	<i>Other Company</i>	58	19.3%
	<i>PETROJET</i>	126	41.9%
	<i>Sodic</i>	1	0.3%
What is your organization's total employee headcount?	<i>The Arab Contractors Osman Ahmed</i>	1	0.3%
	<i>100 to 101</i>	18	6.0%
	<i>1001 to 5000</i>	17	5.6%
	<i>500 to 1000</i>	11	3.7%
	<i>5001 to 10000</i>	71	23.6%
How long has your organization been in business?	<i>More than 10000</i>	184	61.1%
	<i>Less than one year</i>	2	0.7%
	<i>1 – 4 years</i>	4	1.3%
	<i>5 – 9 years</i>	8	2.6%
	<i>10 – 50 Years</i>	269	89.1%
	<i>Older than 50 years</i>	19	6.3%

4.2 Data Preliminary Examination

This examination is essential in quantitative research (Hair, Hult, Ringle, & Sarstedt, 2017). Sue and Ritter (2012) stated that the collected data should be screened and cleaned from errors and incomplete answers. Even though the corrective actions are not always necessary, the examination is essential to ensure that the outputs of the statistical analysis are correct (Hair, Black, Babin, & Anderson, 2014). Hair et al. (2017) emphasizes that the issues of collected data, including strange response patterns, unengaged respondents, missing data, outliers, data distribution, and common method bias should be inspected. Therefore, those primary issues are examined in the subsequent steps using SPSS.

4.2.1 Outliers

A typical example of unreasonable answers is outliers, which occurs when one or more responses were excessively different from other responses (Sekaran & Bougie, 2016). Hair, Black et al. (2014) defined outliers as cases with unusual values (either too low or too high values) that make these cases distinct from other cases. Outliers can affect the data validity (Hair, Celsi, Money, Samouel, & Page, 2016), impact the data distribution (Hair, Black, Babin, & Anderson, 2014), and bias statistical tests (Field, 2013). In summary, outliers affect the normality of data distribution, and it was therefore imperative to examine the dataset for the existence of such outliers before being subjected

to parametric analysis. Therefore, it is crucial to detect and handle outliers. Univariate detection of outliers entails identifying the cases with variable values that are either extremely low or extremely high (Sarstedt & Mooi, 2014). This type of outliers can be identified using minimum and maximum values (Sekaran & Bougie, 2016). By doing so, there are no outliers detected; see table (A.1) in Appendix A.

4.2.2 Missing Data

Missing data is a common problem in behavioral (Schlomer, Bauman, & Card, 2010), marketing (Sarstedt & Mooi, 2014), and social science studies (Hair, Hult, Ringle, & Sarstedt, 2017). It is sporadic when researchers do not face missing data problems (Hair, Black, Babin, & Anderson, 2014). Missing data arise when participants leave one or more questions unanswered in the questionnaire (Sekaran & Bougie, 2016). Missing data is a problem that reduces the available data for analysis and might produce erroneous findings that lead to bias in the results (Hair, Black, Babin, & Anderson, 2014). The effect of missing data is especially essential when using the SEM-PLS technique for data analysis (Hair, Hult, Ringle, & Sarstedt, 2017) as it is not designed to analyze incomplete data (Jamil, 2012; Kline, 2012). Moreover, the Bootstrapping function, used for examining the relationships between constructs in SmartPLS, cannot be calculated when the sample includes missing data. The data

collected in this study contains some missing data; to overcome this problem, some techniques were proposed in the literature to remedy this problem. Among these methods, it was hypothesized that the EM algorithm would provide the most accurate estimates at all levels of missing data (Roth, 1994; Little and Rubin, 2019). The EM algorithm was adopted for handling missing data using SPSS. The imputed dataset was then imported into SmartPLS software for further analysis.

4.2.3 Normality

Normality refers to the data distribution of a single variable (Field, 2013). In the best-case scenario, data will take a bell-shaped curve to indicate a normal distribution (Hair, Celsi, Money, Samouel, & Page, 2016). The normality test is one of the first measures required to verify that the data collected are appropriate for statistical data analysis. In other words, data not normally distributed might affect the reliability and validity of statistical data analysis (Hair, Black, Babin, & Anderson, 2014). In terms of measuring normality, researchers (Hair, Hult, Ringle, & Sarstedt, 2017; Kline, 2016; Hair, Black, Babin, & Anderson, 2014) recommended using two values to measure the shape of data distribution: Skewness and kurtosis. Skewness refers to measuring the symmetry of the data distribution, while kurtosis refers to the height of the distribution (Field, 2013).

Table 4.2: Normality diagnostics

Construct	Abber.	N	Skewness	Kurtosis
<i>Environmental Scanning</i>	ES	302	-0.619	0.529
<i>Strategy Formulation</i>	SF	302	-0.766	1.245
<i>Strategy implementation</i>	SI	302	-0.612	0.880
<i>Evaluation and control</i>	EC	302	-1.000	1.763
<i>Profitability</i>	PRF	302	-0.923	2.141
<i>Growth Sales</i>	GS	302	-1.095	3.129
<i>Customer Satisfaction</i>	CS	302	-0.466	0.029
<i>Speed</i>	SP	302	-1.109	2.497
<i>Flexibility</i>	FLX	302	-1.058	2.732
<i>Responsiveness</i>	RSP	302	-0.813	1.130
<i>Competence</i>	CMP	302	-0.770	0.790
<i>Strategic Management Processes</i>	SMP	302	-0.817	1.377
<i>Firm's Performance</i>	FP	302	-0.706	1.154
<i>Organizational Agility</i>	OA	302	-1.033	1.727
Remark: Normality assumption attained				

Positive Skewness value indicates that the distribution is skewed to the left, and negative Skewness value indicates that the distribution is skewed to the right (Kline, 2016). Positive kurtosis indicates that the distribution is too peaked, and negative kurtosis indicates that the distribution is too flat (Kline, 2016). The values for Skewness between -2 to +2 and kurtosis between -7 and +7 are considered acceptable in order to prove normal distribution (Hair et al. 2014; Byrne 2016). The results of the normality test

in the table 4.2 show that the values of Skewness and kurtosis for the constructs of the model were within the specified range.

4.3. Structural Equation Modeling

In this study, the researcher has applied structural equation modeling (SEM) for the model analysis. The SEM is a broad strategy to test hypotheses and to find out the relationship between exogenous and endogenous variables. Partial Least Square analysis of SEM (PLS-SEM) is followed in this study. The literature suggests that the PLS method is suitable for studies involving more realistic settings in social science research (Kline, 2005; Tenenhaus et al., 2005). In essence, PLS is a structural equation modeling (SEM) technique similar to covariance-based SEM. This type of model analysis approach, at the same time, tests both the measurement model and path that helps to develop more realistic assumptions (Abdi, 2010; Hair et al., 2017). Hence, this study focuses on examining the prediction of the dependent variable, and the emphasis is on explaining the endogenous constructs. The results of PLS-SEM analysis are presented in the following sub-sections. The previous sections included discussions about the assumptions of SEM and how they were met.

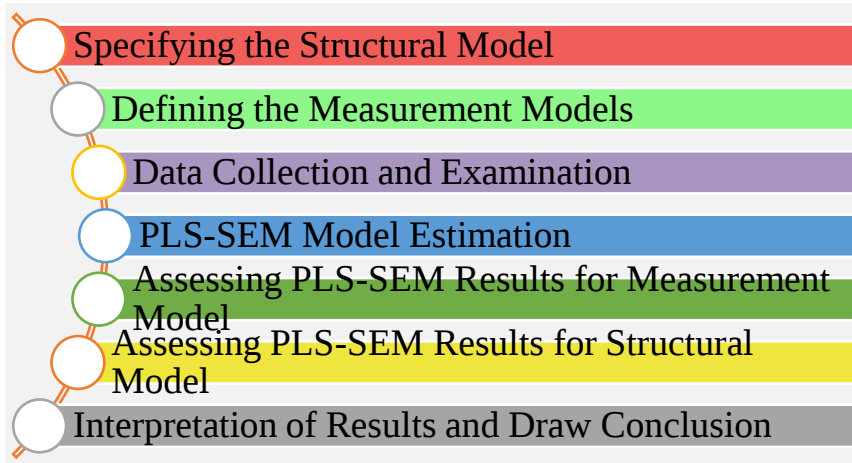


Fig. 4.1: A Systematic Procedure for Applying PLS-SEM

Source: Hair et al. (2017)

The following sections will illustrate the application of PLS-SEM in seven stages. These stages were identified by Hair et al. (2017). Fig. (4.1) shows the stages for applying PLS-SEM. The first stage is concerned with specifying the structural model, while the second stage is about defining the measurement models, and the third stage focuses on collecting and examining the data. These three stages have been previously implemented. The fourth stage involves PLS path model estimation, while the fifth stage requires the assessment of the measurement model's results. The sixth stage is for assessing the results of the structural model. The final stage is making final interpretations of the results and conclusions.

Assessing the Measurement Model

The assessment of the reflective measurement models in PLS-SEM requires evaluating the internal consistency reliability, convergent validity and discriminant validity. Adapted from previous research studies, table 4.4 summarizes the rules of evaluating and finishing the model (Hair et al., 2011; Nachtigall et al., 2003; Xiong et al., 2015; Garson, 2016). Once the reliability and validity of the measurement model have been established, the structural model will be assessed. The following subsections will discuss the reliability and validity of the measurement model.

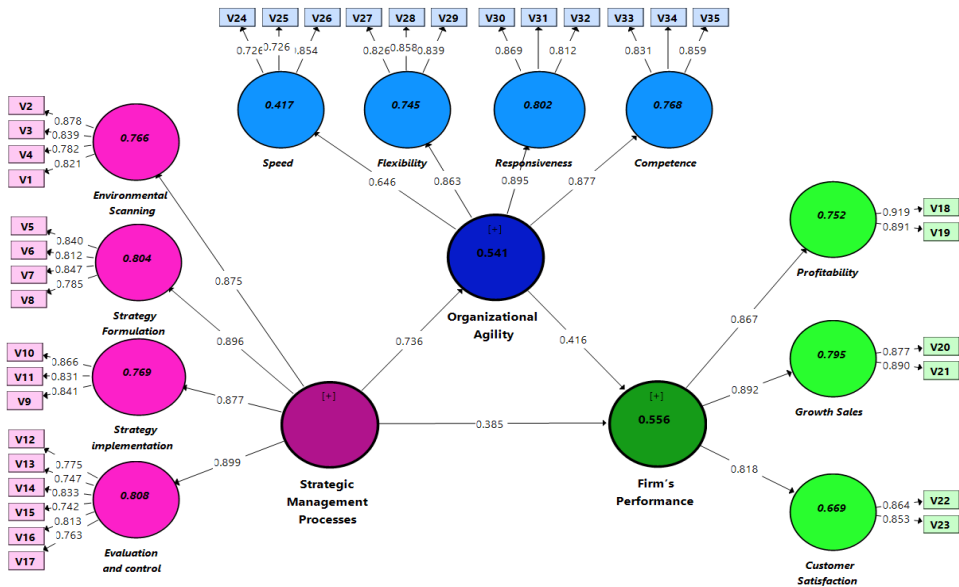


Fig. 4.2: Measurement model assesment

Table 4.4: Rules of Goodness of Fit Assessment and Model Estimates

Evaluation Items	Measurement Items	Fitting Criteria	
		<i>Cut off</i>	<i>Preferable</i>
<i>Internal Consistency and reliability</i>	Composite Reliability	> 0.60	> 0.70
<i>Convergent Validity</i>	Indicator Loadings	> 0.40	> 0.70
	Average Variance Extracted	> 0.40	> 0.50
<i>Discriminant Validity</i>	HTMT	< 1	<0.9

Goodness of Fit of the Model

Tenenhaus et al. (2005), proposed the Goodness of Fit (GoF) as a global fit indicator; it is the geometric mean of both the average R^2 the average variance extracted of the endogenous variables. The aim of GoF's is to take into consideration the research model at all stages, i.e. the measurement model and the structural model, with an emphasis on the overall model performance (Henseler & Sarstedt, 2013). The GoF index can be calculated as follow:

$$GOF = \sqrt{R^2 \times AVE} = \sqrt{0.426611 \times 0.708091} = 0.5496.$$

The criteria of GoF for deciding whether GoF values are not acceptable, small, moderate, or high to be regarded as a globally appropriate PLS model have been given in table 4.11. According to these criteria, and the value of (GoF= 0.55), it can be safely concluded that the GoF model has a higher level of fit to considered as sufficient valid global PLS model.

4.4. Discussion:

The purpose of this step is to discuss the findings within results in the context of the present research, the study aims to empirically aims to find out the impact of strategic management processes on firm's performance by mediating through the mediation of Organizational Agility. In order to find out the answers to research questions questions, a list of hypotheses is developed by using the available literature on the mentioned named constructs. All the hypotheses developed and incorporated in integrated into the framework were derived from the preceding previous literature and established inferences conclusions for the potential research were drawn.

At the beginning, the expectation was very high to find out the significant and supported relationships between all variables based on the literature review and the developed framework and all hypotheses. However, based on the data collected and the analysis used by SPSS and Smart PLS to analyze the data and test the hypotheses, the results were consistent with most of the hypotheses.

Chapter Five: Conclusion, Implications Limitations and Recommendation:

5.1 Conclusion:

Aligned with the study objective, the analysis has managed to present a comprehensive framework that includes very important relevant aspects of the strategic management aspects and shows the

direct relationship of the strategic management and the company performance in mediating the Organization Agility. Most of the hypotheses were confirmed based on the survey analysis.

5.1.1 Direct Effect:

The study had suggested a direct effect between strategic management and organizational performance as presented in Hypothesis # (01), which was confirmed by the analysis as expected. This indicates that the strategic management practices play an important and crucial role in improving company performance.

5.1.2 Mediator Effect:

The study had proposed Organization Agility as intermediaries between the relationship of strategic management and company performance, the study proposed four hypotheses, all supported and expecting significant impact. These results could be a logical reason as most of participants aware about the role of the strategic management process in increase the firm's performance in practice in their works, and the questioners' question covering this part was clearly.

5.2 Practical Implications:

Obviously, the desire of the Egyptian construction companies to pursue internationalization, the challenge and problem of the study ultimately is how to implement the strategic management practices

to achieve a high level of performance of the company while applying the Organization Agility Concepts. Therefore, the aim of such a study is to show the crucial impact of using the Organization Agility while designing, implementing and evaluating the strategic plan and its significant impact on the business performance. Building on this, the first implication of this study is to identify the essential factors that help to present and measure the crucial role of the implementation of strategic management practices in achieving high corporate performance in the Egyptian construction sector, leveraging Corporate Agility as mediator.

5.3 Limitations and Recommendation for Future Researches:

There is extensive empirical and theoretical literature on strategic management, firm performance and Corporate Agility, but there is limited empirical research on the impact of Corporate Agility as mediating the relationship between strategic management and corporate performance, especially in the Egyptian Construction Industry. Therefore, the comparison of the test result hypotheses with previous research results.

The Egyptian construction companies were randomly selected with a total of 8 companies, taking into account that the majority of respondents come from only two companies (PETROJET 41.9 %, El-Marasem 19,6% and El-Swedy 15.9%) and the percentage of the rest of the respondents was very weak, so the results do not represent the entire population. It is highly

recommended for future studies to re-examine the relationship between strategic management and company performance with a larger sample covering more companies in the Egyptian construction sector.

The study includes certain variables and does not consider other important indicators, so the study is limited in focusing on some of the important aspects of the selected variables, such as: the impact of the Employees' Learning & Development and enhancing the corporate internal processes as major indicators to evaluate the company's performance. Therefore, it is recommended to include other indicators to measure the selected variables from other perspectives.

Regarding the company's data availability and unavailable data due to its policies and restrictions, it has been so difficult to obtain the necessary data, for example, to evaluate the company's performance based on the company's revenue, sales, profits, etc., according to the main data in the study was primarily based on the survey and on the participants answering according to their knowledge and experience. It was so important to measure the company's performance through secondary data sources such as the financial statements for the last three years. And will be more specific to assess the effectiveness of applying the strategic management process to company performance by presenting quantitative indicators.

In addition, the researcher received significant feedback on two key concerns from most of the survey participants. First, the many questions in the questionnaire and it takes a long time to report all the questions. Second, the language of the survey should be Arabic and not just English, as most of the participants are unfamiliar with the terminologies mentioned.

List of References:

- Ali, F., Rasoolimanesh, S. M., Sarstedt, M., Ringle, C. M., & Ryu, K. (2018). An Assessment of the Use of Partial Least Squares Structural Equation Modeling (PLS-SEM) in Hospitality Research. *International Journal of Contemporary Hospitality Management*, 30(1), 514-538.
- Benitez-Amado, J., Henseler, J., & Castillo, A. (2017). Development and Update of Guidelines to Perform and Report Partial Least Squares Path Modeling in Information Systems Research. 21 Pacific Asia Conference on Information Systems (PACIS 2017), (pp. 1-15). Langkawi. Retrieved from <http://aisel.aisnet.org/pacis2017/86/>
- Byrne, B. (2016). *Structural equation modeling with AMOS*. New York, NY: Routledge.
- Chen, E.A., Okudan, G.E., Riley, D.R., 2010. Sustainable performance criteria for construction method selection in concrete building. *Autom. Constr.* 19(2), 235–244.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Cohen, J. (1988), *Statistical Power Analysis for the Behavioural Sciences*, Taylor and Francis Group, New York.
- Demo, G., Neiva, E. R., Nunes, I., & Rozzett, K. (2012). Human resources management policies and practices scale (HRMPPS):

- Exploratory and confirmatory factor analysis. *BAR-Brazilian Administration Review*, 9(4), 395-420.
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. University of Akron Press.
 - Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics* (4th Ed.). (M. Carmichael, Ed.) London: SAGE.
 - Garson, G. D. (2016). *Partial Least Squares: Regression and Structural Equation Models*. Asheboro, NC, USA: Statistical Associates Publishers. Retrieved from https://www.smartpls.com/resources/ebook_on_pls-sem.pdf
 - Gaskin, J., Godfrey, S., & Vance, A. (2018). Successful system use: It's not just who you are, but what you do. *AIS Transactions on Human-Computer Interaction*, 10(2), 57-81
 - Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis*. (7th Ed.) Pearson.
 - Hair, J. F., Celsi, M., Money, A., Samouel, P., & Page, M. (2016). *Essentials of Business Research Methods*. New York: Routledge.
 - Hair, J. F., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd Ed.). Los Angeles, CA: SAGE.
 - Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
 - Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): An Emerging Tool in Business Research. *European Business Review*, 26(2), 106-121.
 - Hair, J. F., Sarstedt, M., Ringle, C.M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414-433.
 - Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. (2017). *An Updated and Expanded Assessment of PLS-SEM in Information*

Systems Research. Industrial Management & Data Systems, 117(3), 442-458. Doi:<https://doi.org/10.1108/IMDS-04-2016-0130>

- Henseler, J., & Sarstedt, M. (2013). Goodness-of-fit Indices for Partial Least Squares Path Modeling. *Computational Statistics*, 28, 656-580.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The Use of Partial Least Squares Path Modeling in International Marketing. *Advances in International Marketing*, 20, 277-319.
- Jamil, J. M. (2012). Partial Least Squares Structural Equation Modelling with Incomplete Data: An Investigation of the Impact of Imputation Methods. Doctoral Dissertation, University of Bradford.
- Jamil, J. M. (2012). Partial Least Squares Structural Equation Modelling with Incomplete Data: An Investigation of the Impact of Imputation Methods. Doctoral Dissertation, University of Bradford.
- Jöreskog, K. G. (1971). A General Method for Analysis of Covariance Structure. *Biometrika*, 57 (2): 239–251.
- Kline, R. B. (2005) Principles and Practice of Structural Equation Modelling, 2nd edition, New York: The Guilford Press.
- Kline, R. B. (2012). Assumptions in Structural Equation Modeling. In *Handbook of Structural Equation Modeling* (pp. 111-125). New York: Guilford Press.
- Kline, R. B. (2012). Assumptions in Structural Equation Modeling. In *Handbook of Structural Equation Modeling* (pp. 111-125). New York: Guilford Press.
- Kline, R. B. (2016). Principles and Practice of Structural Equation Modeling. New York: Guilford Press.
- Little, R. J., & Rubin, D. B. (2019). Statistical analysis with missing data (Vol. 793). John Wiley & Sons.

- Mackenzie, S. B. & Podsakoff, P. M. 2012. Common method bias in marketing: causes, mechanisms, and procedural remedies. *Journal of Retailing*, 88, 542-555.
- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annual review of psychology*, 58, 593-614. <https://doi.org/10.1146/annurev.psych.58.110405.085542>.
- Nachtigall, C., Kroehne, U., Funke, F., & Steyer, R. (2003). Pros and cons of structural equation modelling. *Methods Psychological Research Online*, 8(2), 1-22.
- Pallant, J. (2010). *SPSS survival manual*, 4th. England: McGraw-Hill Education.
- Ringle, C. M., Sarstedt, M., Mitchell, R., & Gudergan, S. P. (2018). Partial Least Squares Structural Equation Modeling in HRM Research. *The International Journal of Human Resource Management*, 1-27.
- Roth, P. L. (1994). Missing data: A conceptual review for applied psychologists. *Personnel psychology*, 47(3), 537-560.
- Sarstedt, M., & Mooi, E. (2014). *A Concise Guide to Market Research: The Process, Data, and Methods Using IBM SPSS Statistics*. Springer-Verlag Berlin Heidelberg. Doi:10.1007/978-3-642-53965-7
- Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Best Practices for Missing Data Management in Counseling Psychology. *Journal of Counseling psychology*, 57(1), 1-10.
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill-Building Approach* (6th ed.). (7, Ed.) Chichester, UK: Wiley & Sons Ltd.
- Sue, V. M., & Ritter, L. A. (2012). *Conducting Online Surveys* (2nd Ed.). London: Sage Publications, Inc.
- Tenenhaus, M., Esposito Vinzi, V., Chatelinc, Y.-M. & Lauro, C. (2005) PLS Path Modelling, *Computational Statistics & Data Analysis*, 48 (1), 159-205.

- Wetzels, M., Odekerken-Schroder, G. and Van Oppen, C. (2009) Using PLS Path Modeling for Assessing Hierarchical Construct Models: Guidelines and Empirical Illustration. *MIS Quarterly*, 33, 177-195.
- Xiong, B., Skitmore, M., & Xia, B. (2015). A critical review of structural equation 1962modelling applications in construction research. *Automation in construction*, 49, 59-70.
- Ward, B. (2018). Fred R. David and Forest R. David. *Strategic management: A competitive advantage approach, concepts and cases*. Malaysia: Pearson, 2016, 696 pages, \$282.20 hardback. *Personnel Psychology*, 71(4), pp.638–641. doi:10.1111/peps.12300.
- Carter, C. (2013). *The Age of Strategy: Strategy, Organizations and Society*. Business History, 55(7), pp.1047–1057. doi:10.1080/00076791.2013.838030.
- Chandler, A. D. (1962). *Strategy and Structure: Chapters in the History of American Industrial Enterprise*. Cambridge MA: MIT Press.
- Thompson, A. A., & Strickland, A. J. (2007). *Strategic Management: Concepts and Cases* (11th ed.). New York:
- Pearce, J. A., & Robinson, R. B. (2013). *Strategic Management: Planning for Domestic and Global Competition* (13th ed.). New York: McGraw-Hill Irwin.
- Wheelen, T.L. and J David Hunger (2008). *Strategic management and business policy: concepts and cases*. Upper Saddle River, Nj: Pearson/Prentice Hall.
- David, F.R. (1998). *Concepts of strategic management*. Upper Saddle River, Nj: Prentice Hall.
- Pearce, J. A., & Robinson, R. B. (2013). *Strategic Management: Planning for Domestic and Global Competition* (13th ed.). New York: McGraw-Hill Irwin.
- Wheelen, T. L., & Hunger, J. D. (2007). *Strategic Management and Business Policy* (11th ed.). New York: Prentice Hall Inc.

- Dess, G., Lumpkin, G. T., & Eisner, A. (2007). Strategic Management: Creating Competitive Advantages (4th ed.). New York: McGraw Hill Companies.
- Muogbo, U. S. (2013). The Impact of Strategic Management on Organisational Growth and Development: A Study of Selected Manufacturing Firms in Anambra State. IOSR Journal of Business and Management, 7(1), 24-32.
- Kamel, S. (2021). The Role of Digital Transformation in Development in Egypt. Journal of Internet and e-business Studies, pp.1-10. doi:10.5171/2021.911090.
- Chabenne, S., Dean, D., De Bellefonds, N., Stevens, A and Zwillenberg, P. (2012), Egypt at a Crossroads: How the Internet is Transforming Egypt's Economy, Boston: The Boston Consulting Group in collaboration with Google, November.
- Dess, G.G. and Lumpkin, G.T. (2005). The Role of Entrepreneurial Orientation in Stimulating Effective Corporate Entrepreneurship. Academy of Management Perspectives, 19(1), pp.147-156. doi:10.5465/ame.2005.15841975.
- Lukonga, I. (2020), Harnessing Digital Technologies to Promote SMEs and Inclusive Growth in the MENAP Region, IMF Working Paper, Washington, D.C: The International Monetary Fund.
- Dess, G. G., Lumpkin, G. T., & Marilyn, L. T. (2005). Strategic Management (2nd ed.). New York: McGraw-Hill Irwin.
- Wheelen, T. L., & Hunger, J. D. (2007). Strategic Management and Business Policy (11th ed.). New York: Prentice Hall Inc.
- Dauda, Y.A., Akingbade, W.A. and Akinlabi, H.B. (2010). Strategic Management Practice and Corporate Performance of Selected Small Business Enterprises in Lagos Metropolis. International Journal of Business and Management, 5(11). doi:10.5539/ijbm.v5n11p97.
- Abdi, H. (2010) Partial Least Squares Regression and Projection on Latent Structure Regression (PLS-Regression): Wiley Interdisciplinary Reviews, Computational Statistics & Data Analysis, 2 (1), 97-106.

- Ali, F., Rasoolimanesh, S. M., Sarstedt, M., Ringle, C. M., & Ryu, K. (2018). An Assessment of the Use of Partial Least Squares Structural Equation Modeling (PLS-SEM) in Hospitality Research. *International Journal of Contemporary Hospitality Management*, 30(1), 514-538. Doi:<https://doi.org/10.1108/IJCHM-10-2016-0568>
- Benitez-Amado, J., Henseler, J., & Castillo, A. (2017). Development and Update of Guidelines to Perform and Report Partial Least Squares Path Modeling in Information Systems Research. 21 Pacific Asia Conference on Information Systems (PACIS 2017), (pp. 1-15). Langkawi. Retrieved from <http://aisel.aisnet.org/pacis2017/86/>.
- Byrne, B. (2016). *Structural equation modeling with AMOS*. New York, NY: Routledge.
- Chen, E.A., Okudan, G.E., Riley, D.R., 2010. Sustainable performance criteria for construction method selection in concrete building. *Autom. Constr.* 19(2), 235–244.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Cohen, J. (1988), *Statistical Power Analysis for the Behavioural Sciences*, Taylor and Francis Group, New York.
- Demo, G., Neiva, E. R., Nunes, I., & Rozzett, K. (2012). Human resources management policies and practices scale (HRMPPS): Exploratory and confirmatory factor analysis. *BAR-Brazilian Administration Review*, 9(4), 395-420.
- Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics* (4th Ed.). (M. Carmichael, Ed.) London: SAGE.
- Garson, G. D. (2016). *Partial Least Squares: Regression and Structural Equation Models*. Asheboro, NC, USA: Statistical Associates Publishers. Retrieved from https://www.smartpls.com/resources/ebook_on_pls-sem.pdf
- Gaskin, J., Godfrey, S., & Vance, A. (2018). Successful system use: It's not just who you are, but what you do. *AIS Transactions on Human-Computer Interaction*, 10(2), 57-81.

- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis*. (7th Ed.) Pearson.
- Hair, J. F., Celsi, M., Money, A., Samouel, P., & Page, M. (2016). *Essentials of Business Research Methods*. New York: Routledge.
- Hair, J. F., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd Ed.). Los Angeles, CA: SAGE.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): An Emerging Tool in Business Research. *European Business Review*, 26(2), 106-121.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414-433.
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. (2017). An Updated and Expanded Assessment of PLS-SEM in Information Systems Research. *Industrial Management & Data Systems*, 117(3), 442-458. Doi:<https://doi.org/10.1108/IMDS-04-2016-0130>
- Henseler, J., & Sarstedt, M. (2013). Goodness- of-fit Indices for Partial Least Squares Path Modeling. *Computational Statistics*, 28, 656-580.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Dahya, J., McConnell, J.J. and Travlos, N.G. (2002). The Cadbury Committee, Corporate Performance, and Top Management Turnover. *The Journal of Finance*, [online] 57(1), pp.461-483. doi:10.1111/1540-6261.00428.
- OECD (2015), *G20/OECD Principles of Corporate Governance*, OECD Publishing, Paris.

- Ozili, Peterson. (2021). Corporate Governance Research in Nigeria: A Review. SSRN Electronic Journal. 10.2139/ssrn.3758473.
- Mishra, Rakesh & Kapil, Sheeba. (2017). Effect of ownership structure and board structure on firm value: evidence from India. *Corporate Governance: The international journal of business in society*. 17. 00-00. 10.1108/CG-03-2016-0059.
- Vial, G. (2019). Understanding Digital transformation: a Review and a Research Agenda. *The Journal of Strategic Information Systems*, [online] 28(2), pp.118–144. doi: 10.1016/j.jsis.2019.01.003.
- Nambisan, S. 2017. "Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship." *Entrepreneurship Theory and Practice*, 41(6), 1029-1055.
- Fitzgerald, M., Kruschwitz, N., Bonnet, D., and Welch, M. 2014. "Embracing digital technology: A new strategic imperative," *MIT Sloan Management Review* (55:2), pp. 1-12.
- Savić, Dobrica. (2020). From Digitization and Digitalization to Digital Transformation: A Case for Grey Literature Management. *Grey Journal*. 16. 28-33.
- Hess, T., Benlian, A., Matt, C., & Wiesbock, F. (2016). Options for formulating a digital transformation strategy. *MIS Quarterly Executive*, 15(2), 123–139.
- Wachal, R. (1971). Humanities and Computers: A Personal View. *The North American Review*, [online] 256(1), pp.30–33. Available at: <https://www.jstor.org/stable/25117163> [Accessed 30 Oct. 2022].
- Schallmo, DR (2013). *Geschäftsmodelle erfolgreich entwickeln und implementieren: Mit Aufgaben und Kontrollfragen*. Berlin: Springer-Verlag.
- Samir Mahmoud Ahmed Abdel Wahab, Mohamed Saad. Digital Transformation Acceleration in Health Sector during COVID-19: Drivers and Consequences. *Journal of Business and Management Sciences*. Vol. 10, No. 4, 2022, pp 164-179.
- Luo, Xiaowen & Yu, Shun-Chi. (2022). The Regulatory Effect of Firm Size on Digital Transformation: An Empirical Study of Pharmaceutical

Companies in China. Computational Intelligence and Neuroscience. 2022. 1-12. 10.1155/2022/7731174.

- Honggowati, Setianingtyas & Rahmawati, Rahmawati & Aryani, Y. Anni & Probohudono, Agung. (2019). Strategic Management Accounting disclosure, ownership structure, and firm characteristics in Indonesia manufacturing companies. Jurnal Keuangan dan Perbankan. 23. 10.26905/jkdp. v23i3.3228.
- Mubarak, Muhammad & Zulfiqar, Shaheed & Bhutto, Ali & Fazal, Ali & Shaikh, & Mubarik, Mobashar & Samo, Kamran & Mastoi, Sanya. (2019). The Impact of Digital Transformation on Business Performance A Study of Pakistani SMEs. Engineering, Technology and Applied Science Research. 09. 5056-5061. 10.48084/etasr.3201.
- D'arc Uwanyiligira, J 2020, 'Strategic Management Practices and Service Delivery in Public Institutions in Rwanda', International Journal of Scientific and Research Publications (IJSRP), vol. 11, no. 1, pp. 119–143.
- Rashid, Md.M., Ali, Md.M. and Hossain, D.M. (2020). Strategic management accounting practices: a literature review and opportunity for future research. Asian Journal of Accounting Research, ahead-of-print(ahead-of-print). doi:10.1108/ajar-06-2019-0051.

Appendix

The Research Questionnaire:

Participants,

The Egyptian construction industry today's rapidly changing and exposed a huge circumstance according to the massive increasingly global business environment. Thus, no organization or business is safe enough from competition. Therefore, organizations must operate in uncertain, competitive, and changeable environments. There are many sources of change, which result from such factors as intensified global competition, reduction in delivery time, high customer expectations, demand diversification, and new technologies

You are invited to participate in this survey with approximately other 300 people. This survey will be part of a thesis in partial fulfillment of the requirements for the award of the degree of Doctorate on Business Administration "DBA".

Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate. Your information will be coded and will remain confidential. If you have questions at any time about the survey, or its procedures you may send email to h_msakr155@yahoo.com with a subject "FEEDBACK to Strategic Management Survey".

It will take approximately (5-10) minutes to complete the survey. Your participation in this study is completely voluntary. There are no foreseeable risks associated with this project. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any point. It is very important for us to learn your opinions.

Thank you very much for your time and support. Please start with the survey now by clicking on the Continue button below.

1. What is your gender?
 - ☐ Male
 - ☐ Female
2. What is your age?
 - ☐ 21 or younger
 - ☐ 22 to 35
 - ☐ 36 to 52
 - ☐ 53 to 59
 - ☐ 60 or older
3. What is your company Name/Structure?
 - ☐ Talaat Mostafa
 - ☐ Orascom
 - ☐ Hassan Allam
 - ☐ Dar Al-Handasah
 - ☐ Al-Durrah
 - ☐ El-Sewedy

- The Arab Contractors Osman Ahmed
- SIRA
- Al Morshedy
- Khalda
- Emar Masr
- PETROJET
- Palm Hills
- Sodici
- El- Marasem.
- Other Company

4. What is your organization's total employee headcount?

- 100 to 101
- 500 to 1000
- 1001 to 5000
- 5001 to 10000
- More than 10000

4. How long has your organization been in business?

- Less than one year
- 1 – 4 years
- 5 – 9 years
- 10 – 50 Years
- Older than 50 years

Please indicate your relative rate for the criteria provided
according to the following:

**1 = Strongly Agree – 2=Agree – 3=Neutral – 4= Disagree –
5=Strongly Disagree - N/A = Not Applicable**

S	Question	Indicators	Rate				
			1	2	3	4	5
1. Strategic Management Processes (Independent Variable)							
1	Does your organization develop strategic plans in the last five years?	Generic					
2	Your company have specific and clear strategic objectives	Environmental Scanning					
3	Your company do the external analysis and internal analysis to know the strategies to adopt	Environmental Scanning					
4	We make strategic decisions based on a systematic analysis of the company’s business environment	Environmental Scanning					
5	Your company use of situational analysis tools to gather information	Environmental Scanning					
6	The strategies formulated in line with the company’s vision and mission statements	Strategy Formulation					
7	Your company responds to the environmental changes by formulating strategies	Strategy Formulation					
8	Your company develop the company’s strategic plan based on Strategic Management Techniques and Tools	Strategy Formulation					
9	Your company have publicize the strategic objectives with the key employees in the organization	Strategy Formulation					
10	Your company have precise Strategic Objectives and Programs for Implementing the strategic plan	Strategy implementation					
11	Your company have precise Policies and procedures for implementing the strategic plan	Strategy implementation					
12	Your company allocate the sufficient financial, human and other resources to implement the strategies and plans	Strategy implementation					
13	Your company’s management demands periodical cross-departmental meetings to interchange new developments, problems, and achievements?	Evaluation and control					
14	To keep in line with our business environment we make	Evaluation and					

	continual small-scale changes to our strategy	control						
15	Your company implement Performance Management system such BSC Methodology (Balanced Score Card) to implement and evaluate the strategic plan	Evaluation and control						
16	The application of Balanced Score Card provides strategic financial and non-financial performance measures for the management of the company.	Evaluation and control						
17	your company use of various evaluation techniques such as strategic audit, performance appraisal and benchmarking.	Evaluation and control						
18	On overall, the strategies adopted by your organization improved the performance of your business?	Evaluation and control						
2. Firm's Performance (Dependent Variable)								
19	The internal process enhances quality and timely delivery of the company's Products/Services	Internal Process (Enhance the Internal Process)						
20	Quality is our key competence, we produce products/services of benchmark status	Internal Process (Enhance the Internal Process)						
21	Innovation is our key competence, we regularly introduce products/services innovative, technologically advanced	Internal Process (Enhance the Internal Process)						
22	The profit margin of the company is increased	Financial (Profitability)						
23	Return on Investment (ROI) and the Return on Assets (ROA) is increased	Financial (Profitability)						
24	Your company's sales turnover is increased	Financial (Growth Sales)						
25	Your company gain market share and achieve growth in Sales.	Financial (Growth Sales)						
26	Strategic Management Processes enhances Customer's Satisfaction and Customer's retention	Customer (Customer Satisfaction)						
27	Your company interact and analyze the number of customer's complaints and customer satisfaction surveys	Customer (Customer Satisfaction)						
28	Your management allocate budget to enhance Managers and Employees qualification and skills	Learning and Growth (Enhancing employees' skills)						

		& performance)					
29	Your company enhance employees' skills and performance through Training, Better employee reward and Employee participation in decision making or any other methods	Learning and Growth (Enhancing employees' skills & performance)					
3. Organizational Agility (Mediator Variable)							
30	Compared to competitors to what extent you agree that your firm can easily and quickly respond to changes in aggregate consumer demand	Speed					
31	To what extent you agree that your firm react swiftly to new product or services to suit an individual customer	Speed					
32	Our business unit has the ability to rapidly change services volume compared with our competitors.	Speed					
33	To what extent you agree that your firm expand into new regional or new markets	Flexibility					
34	To what extent you agree that your firm introduce a new pricing schedule in response to changes in competitors' prices	Flexibility					
35	Our business unit has the ability to develop new working methods at a high rate compared with our competitors.	Flexibility					
36	To what extent you agree that your firm adopt new technologies to produce better products or services	Responsiveness					
37	To what extent you agree that your firm switch suppliers to get better benefits of lower costs or better quality or improved delivery times	Responsiveness					
38	We are able to adapt our strategy to fit changing circumstances without losing sight of the strategy's overall purpose.	Responsiveness					
39	To what extent you agree that your firm switch business partners (Such as partners for the complimentary offer, partners that provide the relationship with customer or channel intermediary, e.g. reseller, distributor) to fulfill customer's requirement	Competence					
40	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.	Competence					
41	We involve key people we work with in discussions of our strategies and solicit their thoughts on the best way to implement them.	Competence					