Research in Economics and Management
ISSN 2470-4407 (Print) ISSN 2470-4393 (Online)
Vol. 6, No. 1, 2021
www.scholink.org/ojs/index.php/rem

Original Paper

The Impact of Digital Transformation on Innovation and Performance in Companies—Nestle Lebanon Case Study

Mohammad Yassine[1*], Prof. Mohammad Diab[1,2] & Dr. Slim Hadad[1]

[1] Jinan University, Tripoly, Lebanon

[2] Lebanese University, Beirut, Lebanon

[*] Mohammad Yassine, Jinan University, Tripoly, Lebanon

Received: January 11, 2021 Accepted: February 3, 2021 Online Published: February 22, 2021

doi:10.22158/rem.v6n1p112 URL: http://dx.doi.org/10.22158/rem.v6n1p112

Abstract

In today's increasingly competitive and digitized world, the journey of digital transformation is no longer an option for many organizations, but rather, a must. However, there is a wide discussion on the aftermath of Digital Transformation on corporations of various sizes. This is especially true for organizations that introduced employee training and development in parallel with digital transformation, and which faced multiple challenges regarding the introduction of the employees into the new digital phase. This is important to explore further, given the pivotal role of digital transformation in the long-term success of organizations. Using a combination of a theoretical literature review previous studies and a field study, this research aims to explore the impact of Digital Transformation on the performance and innovation in companies through the case study of Nestle Lebanon. It proposes the hypothesis that there is a positive correlation with statistical significance between accomplishing Digital Transformation and enhancing the performance in Nestle Lebanon.

Keywords

digital transformation, organizational performance, innovation, employee capabilities

1. Introduction

All business companies witnessed an unprecedented massive competition in the twenty first century that forced all those companies to get more involved within the technological advance and to venture into the world of digital technology to ensure the competition consistency for its services and products. And due to the accelerating overwhelming technological advance in all different aspects of life, the digital transformation is now considered one of the vitals requirements in the business world, for now it is one of the inclusive setups that work on enhancing the whole corporation performance and

facilitating and ensuring the accessibility of its services to the costumers. What is meant by the Digital transformation is applying the technology within the corporations and the companies of both public and private sector, since it upgrades the levels of innovation and promotes the style of advertising the services to the costumers with the ideal recruitment of the modern technological means (Al-Bar, 2018).

And the Digital Transformation is known to be a modification in the peoples' lifestyle where they rely on advanced and modern technologies in addition to substituting the human role with more contemporary mechanisms escalating the importance of non-material intellectual value of the company and its byproducts and to the facilitation of manufacturing modern and innovative investments (Al-Salmi, 2005).

In the past few years technology did change the mentality and the patterns of behavior of the costumers thereby forcing a huge count of companies to reconsider the influence of the modern digital technologies and exploiting its benefits which led to widening the capability of these companies to achieve its goals.

Based on that, Digital Transformation is now one of the most critical subjects for it directly affects the overall performance of the corporations in particular the commercial establishments who are suffering from low performance lately, hence, they better start studying this transformation which requires enhancing and fortifying all the sectors based on the change in the mentalities, technologies, organizational structures and other aspects, and for the prominent role of Digital Transformation in achieving innovations that supports and maintain the success and prosperity of the corporations.

2. Literature Review

In their study Al-Soma (2018) "Digital Transformation as strategic basis for economic Transformation" aimed to unravel the technologies of Digital Transformation and its influence on correlation with the economic transformation and clarify the future of Digital Transformation in Saudi Arabia, and a descriptive methodology was chosen to achieve the goals of the study and the results of the study demonstrated that Digital Transformation is one of the most prominent languages of our age and that it is an inclusive system for change affecting the organizational structure of the companies. Furthermore, Digital Transformation was modifying enterprises work paradigm and its supreme management.

From the findings of the study Al-bar (2018) "The Technologies of Digital Transformation" defined the notion of Digital Transformation and its steps, contributions, fields and expose of the futuristic broad horizons of Digital Transformation. Several results were extracted mainly that Digital Transformation is widely considered one of the avant-garde solutions that provides huge opportunities for investment for a variety of companies which in return help the companies in enhancing its performance and upgrading its competition levels by exploiting the technological advance to become more flexible and dynamic in the future. This study relied on a descriptive analytic methodology to achieve its objectives.

A Bulgarian study done by K. Schwertner (2017) "Digital transformation of business" found that maturing digital businesses are focused on integrating digital technologies, such as social, mobile,

analytics/big data and cloud, in the service of transforming how businesses work. The ability to digitally reimagine the business is determined in large part by a clear digital strategy supported by leaders who foster a culture able to change and invent the new. Unique to digital transformation is that risk taking is becoming a cultural norm as more digitally advanced companies seek new levels of competitive advantage.

The Study done by Tahir and Shafique (2010) "Usage of Electronic Information Sources by Anthropology scholars" aimed to weigh the influence of relying on digital resources on the anthropology department personnel at the universities of Punjab, Lahore and Pakistan. A survey was distributed to 62 pedagogics and the results illustrated that although personnel of the anthropology department still mainly rely on written paper sources, they also rely on digital sources. Furthermore, they prefer using a computer at home and office. Despite facing some difficulties while using modern technologies they say it facilitated their work.

In a study done by Ulukan (2005) "Digital Transformation: Data, Reactions and the Personal Identity" identified the main challenges to the corporations due to the Digital Transformation and the leverage of this transformation on the personal connection within those corporations. To achieve its goals the study followed a descriptive methodology due to its compatibility with the study subject and goals. Several results were obtained but the main points were that the Digital Transformation was accompanied with forcing changes in the corporations systems and models. Also, it required additional efforts from the higher administrations to maintain the corporation identity and extracting a positive touch from the Digital Transformation.

The previous studies aimed to reveal the Digital Transformation techniques and its relevance with economic transformations. The previous followed the approach of considering the Digital Transformation an optional choice for corporations and studies the individual preference upon using its techniques. Most of these Studies followed a descriptive analytic methodology. In contrast, this study will deal with Digital Transformation not as a choice but as an obligation that has to be within the inner core of any corporation policy.

2. Problem Statement and Hypothesis

Reports from various studies dedicated for investigating the aftermath of Digital Transformation confirmed the existence of some problems for corporations that accompanied the technologic revolution such as the urgent necessity of developing employees' skills, and the difficulty of introducing some employees to this sudden modification. Consequently, those techniques are deemed very expensive in addition to being hard to achieve (Ismael, 2017).

In order to achieve a successful activation of the modern IT (Internet Technologies) in light of the modern technological advance, various corporations are investing tremendous efforts to achieve this goal. However, modern corporations are suffering from a general flaw in the recruitment within this Digital Transformation as a result of the absence of a general vision capable of guiding the corporation

through this transform in addition to the deficiency of the IT skills of the employees of those corporations. And hence the problem of this study can be summed up into the answering of the following fundamental question:

What is the impact of Digital Transformation on the performance and innovation in companies?

2.1 Questions of the Study

The fundamental question of the study will hereby be decomposed into the three following questions:

1) What is the influence of achieving Digital Transformation on the performance of Nestle Lebanon?
2) What is the influence of achieving Digital Transformation on the innovation of Nestle Lebanon?
3) What are the Digital Transformation obstacles that hinder the development of the skills of the employees in Nestle Lebanon?

2.2 Hypothesis

The study aims to achieve its objectives by testing the following hypothesis:

- There is a positive correlation with statistical significance between accomplishing Digital Transformation and enhancing the performance in Nestle Lebanon.
- There is a positive correlation with statistical significance between achieving Digital Transformation and enhancing the innovation in Nestle Lebanon.
- There is a negative correlation with statistical significance between the obstacles that hinder the achieving of Digital Transformation and enhancing the skills of the employees in Nestle Lebanon.

To analyze the result of the study two statistical tools will be applied:

3. Methodology

To facilitate the gathering of information and its analysis in order to validate or refute the hypothesis, a survey in the form of a questionnaire will be executed. And the survey is a vital statistical tool for scientific investigation; it consists of a set of multiple interconnected questions in a fashion that ensures the achievement of the object of study

To analyze the result of the study two statistical tools will be applied:

- **Simple Linear regression:** which allows the study and summarization of the relation between two variables (one called the dependent variable while the other is called the independent variable)?
- **Analysis of Variance (ANOVA):** which allows the judgment of whether a survey or an experiment has a statistical significance via a certain numerical value α (Statistical significance when $\alpha < 0.05$ and statistical insignificance when $\alpha > 0.05$)

3.1 Population of the Study

The population of the study is the collection of all the elements that are affected by the phenomena under study. The population of this study will be the employees working at Nestle Lebanon. The choice

was laid upon this particular company after putting into consideration the engagement this company made with accomplishing Digital Transformation and applying multiple digital technologies hence reconstructing the company's intra-Telecommunications and viable operations in order to redirect its employees' orientations toward Digital Transformation.

3.2 Limitation of the Study

Can be summarized into:

- Object Limitations: The object of the study was restricted to the disclosure of the impact of Digital Transformation on the performance and the innovation in Nestle Lebanon.
- Temporal Limitations: the duration of the study was limited to be from June 2018 to May 2019.
- Spatial Limitations: Based on the population the study naturally took place only in Lebanon.

3.3 Variables of the Study

The dependent variable: (Digital Transformation).

The independent variables: (Performance, Innovation, Capabilities of the employees).

Digital Transformation: It is the merging of modern digital technology in all aspects of business and an intrinsic alternation in the method of advertising and serving the commercial value to the costumer. As well as being a mentality modification that forces the corporation to constantly challenge the current situation.

Performance: It is the degree of which the employees can fulfill their duties, and it reflects the modality of which the individuals can satisfy the job requirements. It is measured based upon the results the individual have achieved (Rawya Abdul Hassan, 2002).

Innovation: It means the individual capability of discovering new ideas, patterns, methods and concepts applying those qualities in a new pioneer way given that it fits the current situation. It also means the individual capacity of using the available ideas, Data and equipment in a unique special manner (Ismail Abdul Fattah, 2003).

Employees skills: It is a process of long and extensive development and nourishment that concerns all the working personnel capacities, it targets building up the human, technologic, logistic resources and traits (United Nations Economic Social Council, 2006).

4. Significance of the Study

The study provides a better insight of the impact of Digital Transformation and its status in modern life, and its influence on various systems and institutions and the overall level of innovation in modern life. The value of this study is autonomously self-generated from the subject of the study which is now considered to be one of the essential subjects. Nevertheless, almost negligible count of studies was executed on this subject and hereafter this study will be a great asset to the previous studies.

Moreover, the importance of the study is also derived from the general growth of interest in **IT** and Telecommunications and its effective role in facilitating the endeavors of corporations and interpolating changes in them, and in supporting innovation that proved to be an extra efficient factor at enhancing performance and the brevity in executing missions and contacting with costumers.

5. Research Objectives

According to global studies, the digital economy is considered to be a driving force to the increase of growth in the whole economy and it occupies 5 to 9 % from the gross domestic product in the developed countries, and hence, it is an obligation to neutralize all the pending obstacles that hinder the achievement of a Digital Transformation whose primary target is re-shaping and defining job descriptions, since those transformations usually lead to altering the costumer standards, digitalizing products and services, emerging of new economical paradigms and advancing commercial transactions. The current study came to investigate the impact of Digital Transformation on the innovation and performance in corporations. In particular, in Nestle Lebanon, and the objectives of the study came as follows:

1) Recognizing requirements for accomplishing Digital Transformation, which improve the performance of Nestle Lebanon.
2) Recognizing requirements for accomplishing Digital Transformation, which improve the innovation of Nestle Lebanon.
3) Recognizing obstacles for accomplishing Digital Transformation, which hinder the development of employees' skills.

6. Digital Transformation Concepts, Characteristics and Targets

6.1 The Components of Digital Transformation

Digital Transformation is defined as a process of transition undergone by governmental administrations or corporations in which they rely on a work paradigm totally dependent on digital techniques. The main goal of this transformation at corporations is the innovating of services and products and establishing new revenue channels hence increasing the commercial value of the products and the elevating of the shopping patterns by creating an electronic network between customers and suppliers, in addition to providing better transparency and auditing so that now an administrator can observe the whole working process from all angles from any place in the world (https://www.forbes.com/sites/danielnewman/2017).

6.2 The Steps toward Accomplishing Digital Transformation

It can begin with building up a digital strategy while repairing the current situation and this can only be achieved by measuring and evaluating the current digital capabilities. After that both requirements and obstacles for achieving Digital Transformation must be identified in order to propose a concrete inclusive work plan that covers up all the possible situations and circumstances and keeps the Digital

Transformation wheels on track. Finally, the presence of an avant-garde mentality that yearns for the change is a primary condition for achieving the strategic objectives.

Based on the above, Digital Transformation can be defined as the merging of the digital techniques in all aspects of business which leads to radical modifications in the regimes of work and advertisement for corporations. Furthermore, it is a cultural alteration that requires from corporations a new fighting mentality that constantly challenges the current situations and accepts failures in a pragmatic manner. This often requires from the corporations the desertion of traditional commercial paradigms in favor to more modern unorthodox ones.

6.3 The Characteristics of the Digital Transformation

Digital transformation provides tremendous opportunities for both governmental institutions and corporations. The main opportunities are accomplishing the corporations' objectives and guiding these corporations to attain a strategic vision with fewer resources and materials from the ones needs at the current time or prior to the Digital Transformation era. It will also grant the corporations the opportunity of improving the industrial process with an optimized minimal usage of materials. Moreover, Digital Transformation will provide larger opportunities after opening the channels of communication between private and public sectors enhancing their partnership in cooperation with the ministries. The recognition of the inevitability of this transition accompanied with collective work can have a fundamental asset toward the growth and prosperity of those sectors which will be reflected in the form of a positive progress on the national level by creating a more pragmatic business mentality and greater capacity of perception and planning for the future.

6.4 The Variable Characteristics for Digital Transformation

Those are the domains by which Digital Transformation will take place and they are constituted of:

- Digital Business Strategy.
- Staff and Costumer Engagement.
- Technology.
- Data and Analysis.

➢ The Applied Characteristics of Digital Transformation:

Those are the tools which the Digital Transformation rely on in order to achieve the transition and they are constituted of:

- Techniques: where the building up of Digital Transformation occurs by means operational systems, storage areas and programs that function inside technological environments and information centers allowing the ideal usage of all the resources. It also includes establishing a safe network of services to the corporation staff and personnel in addition to the customers and suppliers via professional teams taking the responsibility of managing and maintaining the technological network whether it is a local or cloud network.

- Data: Corporations must spend tremendous efforts at managing and analyzing the data in a regular and effective manner in order to provide information and effective measures in addition to

developing convenient tools for statistical analysis, searching for information, and predicting the outcomes. Also corporations must constantly review the data to ensure the continuation of its flux and investing this data for the best of the corporation.

- Human resources: A vital component that it is burdensome for corporations to achieve Digital Transformation without. And hence it is necessary for corporations to introduce suitable personnel capable of using and analyzing data in order to choose the correct and effective measures.

- Operations: Is the set of all the activities and interconnected missions that produces a definite product or service for the costumers. Corporations must find an active technical ground that allows the development of internal; and external operations hence ensuring the ideal employment of the Digital Transformation. And that includes the interior and exterior harmony of executing operation under a direct supervision (Al-Bar, 2018).

It can be deduced from the above that the Digital Transformation aren't only restricted to costumers and consumers but it expands to Governmental institutions and corporations for it significantly reduces the costs and efforts and improves the operational efficiency. Moreover, it works on improving the qualities of the products and simplifying the procedures of attaining the given services. Digital Transformation also created the opportunities to introduce innovative services that are out of the reach of the traditional methods of advertising services, it helps the governmental institutions and corporations in expanding toward wider domains and reaching a greater variety of costumers and consumers.

6.5 The Targets of Digital Transformation

Digital Transformation aims to expand the "Internet of Things" and to aid accomplishing a successful transition of the governmental sectors and private corporations into a work paradigm that depends on digital techniques of innovating products and services. On a global scale, the number of appliances and devices that are connected to the Internet of Things is estimated to be roughly 8.4 Billion devices and according to the experts at SISCO (Systems Integration Specialists Company) they estimate that the number will rise to more than 500 Billion devices by 2030. Therefore, the current phase of Digital Transformation will be more immense and requiring than the preceding phases.

According to experts, the current phase of digital turmoil in most business sectors will turn to be the driving force for achieving the future objectives and creating radical changes in economics and smart urban metropolitan societies. Building up on this, the Digital Transformation forces the Governmental institutions and private corporations to invest in the "Internet of Things" in order to be more capable, efficient and clairvoyant at work which are the basic traits that will help innovating more rapid solutions. In order to ensure success, corporations must apply Digital Transformation on the 4 different fields: Techniques, Data, personnel and operations. And the huge count of mobile devices and internet appliances necessitate mega Telecommunication networks and modern infrastructure.

➢ Digital Transformation and Enhancing the Efficiency of the Corporations:

Digital Transformation aims to associate public and private sectors hence providing the opportunity of accomplishing common business with a high level of harmony and integrity. It is now mandatory for corporations and to achieve a digital transition as a result of the tremendous accelerating advancement in using IT equipment in all life aspects whether related to private sector, public sector or personal usage. For that purpose, there is a massive pressure and demand from all the circles of society on corporations and organizations to enhance its services quality and accessibility on the digital channels.

➢ Digital Transformation and Futuristic Objectives:

The national pride that comes from building up, managing, and operating the governmental infrastructure and business is totally dependent on Digital Transformation which is considered one of the primary national targets for the development of the future of the people. And the objectives of the Digital Transformation lead to the achievement of a radical change in serving the people at the multiple levels of health, education and security. Also, Digital Transformation will contribute in transitioning the working methodology in multiple sectors such as oil, banking, retail business, tourism and much else into new methodologies that can create new innovative job opportunities contributing in the huge economic advance. (https://www.cio.com/article/3063620/it-strategy2016).

It can be concluded that Digital Transformation has become one of the primary objectives for all corporation who wish to achieve a progressive service improvement, and provide the costumers with better accessibility to those services. Digital Transformation is not only limited to the mere applying of technology at corporations, but it is an inclusive program that creates a renaissance in the systems of corporations: modifying the corporation work paradigm on both internal and external levels in addition to the methodology of introducing the services to the costumers while making this introduction easier and more rapid.

7. The Constitutional Elements and the Measuring Indicators of Digital Transformation.

7.1 The Constitutional Elements of Digital Transformation

Digital Transformation as a modern system includes a collection of interactive elements functioning in an effective manner, in what follows is a description of those constituents:

- Digital Products: those are considered the unique elements that differentiate digital economy from traditional one; they play the role of the elements of exchange in digital economy. Digital products don't solely refer to digital music and video industry, it expands further to several traditional materialistic products that have been drastically changed by digitalization; for example, books, magazines, newspapers, printing photos, booking tickets, the ability of payment and cash withdrawal via electronic currency, governmental services such as the ability of accessing formal documents, paying bills, sending and receiving messages, auctions blocks on the internet, applying to universities and schools and distance learning via the Internet in addition to the possibility of communicating between those sectors which leads to the emerging of cyber communities. One of the primary aspects of digital products compared to non-digital ones is the possibility of manufacturing the products

according to the costume preferences and requirements. Moreover, the cost curve of digital products is different than that from other products; since the largest part of their costs lie in fixed costs and the contribution of recurrent costs are considered very small, which helps in raising profits in as soon as sales rise. (Efraim turban, 2006, p. 428).

- Costumers: what distinguishes the costumers of a digital marketplace is their gigantic count, since every individual who is surfing the internet can be considered as a possible consumer in the eyes of the internet working organizations. The costumers are able to search, select, and even compromise due to the huge supply of products and services in the electronic marketplace and also due to the giant display of information on websites facilitating the transactions for the costumers.

- Suppliers: and those are represented by ball the active organizations on the internet either by displaying their own products or by advertising the products of other organizations and it is here it is worth mentioning that some of the organizations are exclusively existent and active on the digital platforms without any form of tangible existence on traditional marketplaces. Those organizations benefit from the characteristics of Digital Transformation that made it possible for them to operate globally neglecting the existence of geographical boundaries.

- Infrastructural Organizations: and those are the organizations that are responsible about maintaining the digital infrastructure and that includes cyber programs, servers and other materialistic components to ensure the ideal basis for accomplishing Digital Transformation.

- Brokers: they have a vital role in accomplishing Digital Transformation since they are the ones responsible of gathering data and information providing those data to the customers and suppliers so that they can perform their transactions more easily.

- Supporting Services: varies from issuing licenses that validate the integrity, commitment, and security of dealing with suppliers in addition to providing the essential knowledge for the different sides of this system.

- Content Developers: they are the organizations that are responsible for developing websites and their contents. (Nachunilach & Srilatazheer, 2002, p. 126).

It can be concluded that the rapid development in Telecommunication systems caused a vast spread in the usage of IT and electronic multimedia which in turn caused a modification of human lifestyle; this development directly led to a change in the economical patterns, and established a new form of relationships amongst corporations, customers, suppliers, programmers and all the concerned parties in a way that now the information, demand and services are instantly available and reachable.

7.2 The Measurement Indicators for Digital Transformation

In 1997, the report of the emerging digital transformation issued by the US Department of Foreign Affairs introduced a paradigm for the required indicators for the measurement of the digital transformation which can be summarized as follows:

- The Shape and the Size of the Major constitutions for Digital Transformation which is still at the phase of development such as e-commerce (electronic trade) and specially the evolution of computer technology and its proliferation at work places.
- Business Companies and its contribution of the usage and development of advanced technologies and e-commerce, in addition to the modifications happening in the structuring and functioning of the market including the modifications in the manner of introducing goods and services in addition to the change of the nature of local and global competition.
- Economic and Social Applications of the Technological Revolution such as the changes in productivity resulting from investing in IT.
- Demographic Characteristics of Society under Digital Transformation.

Taking into consideration the progressive and dynamic nature of Digital Transformation those indicators were deemed insufficient for measuring Digital Transformation and therefore they were modified to the following form:

- IT Infrastructure: a quantifiable measure should be applied on the material side (equipment and appliances), technical side (the Digital Transformation infrastructure, programs, systems, algorithms…etc.) and the installation of Telecommunications and IT (computers, telephones, fiber optics, satellites, wired and wireless networks…etc.).
- E-commerce: should be measured by the magnitude and pattern of electronic transactions between corporations and costumers in addition to the quantity of products (material or digital). The measurement of products should be done separately since material products require being delivered by hand to customers whereas digital products exclude wholesalers and retailers and reach directly to customers.
- Corporation Structure and Industry: a measurement should be applied to the enhancements in IT, programs and the structural composition of corporations and marketplaces.
- Labor and Demographic Characteristics: it is required to measure the demographic characteristics and labor market characteristics for the labor and personnel who are participating in the Digital Transformation, then it is required compare these characteristics to the characteristics of those who are not participating in Digital Transformation.

Based on the above, it can be concluded that the technological revolution and Telecommunication advance are the major aspect of the current age, and the primary competition in the world is the competition for gaining access to the information and possessing the means of its analysis, because this will lead to a correct mechanism in electing decisions based on precision and adequate analysis and thus innovating the suitable economic policy for countries and corporations. The global economy witnessed fundamental shifts that resulted in the emergence of new economic ideas in the economic lexicon such as the Digital Transformation based economy and the constant close coordination of data and Telecommunication, and preaching for the society of information and data and also encouraging the development of infrastructures, techniques and patterns that can establish a more coordinated flux

of data, and this flux can provide the ability of reducing the gap between traditional and digital, and can also provide the corporations the ability to adjust and cope with global scale variables by relying on the correct reading of the indicators and characteristics of Digital Transformations.

7.3 The Driving Motives for Digital Transformation.

There are several motives that have driven and still driving Digital Transformation toward progress and advancement and since it is hard to find causality between those motives, those motives should be separated and they are illustrated as follows:

- Globalization: it is evident today that globalization generated an economy with no boundaries; since the market with its various forms is not bounded within one country anymore. For example, the European nations became through the European Union a major economic superpower after surpassing its geo-political boundaries and became an effective participant of global trade. It is also noted that most industrial nations and emerging states such as China are racing toward new markets and acquiring a share of the market everywhere in the world. (Bassim Ghadeer, 2010, pp. 138-140).
- Multinational Enterprises: they monopolize the top levels of technology in the world mainly the telecommunication and IT thus they are the primary motives of the governance of Digital Transformation.
- The Contemporary Technological Revolution: the association of digital economy with technology is trivial. Therefore, technology one of its essential driving motives since technology can be considered the spark that ignites the fuel of the engines of permanent advancement thus giving Digital Transformation its modern and futuristic aspects.

Based on the above, it can be concluded that technological development can be considered the main theme of the movement of history. Modern technologies contributed in developing science and its applications at a high rate, this basically gave technology its current might and power, and gave modern world with its contemporary technological applications a huge influence on modern man more than at any time in history. This gave man the privilege of the solid base of modern economy and the strategic playmaker for defining the requirements of Globalization and multi-national enterprises.

Digital Transformation is deemed modern portal of local and global economic dealing, it supports economy that is based upon modern telecommunication and specially the internet, and it is marked by several characteristics that differentiate it from traditional economy such as the flashing performance, direct response, lower costs and an open economy that knows no boundaries. These characteristics make the business paradigms in digital economy more effective and efficient than that in traditional economy.

Digital Transformation on the other hand produced several key requirements such as the infrastructure for telecommunication and internet in addition to the Legislative framework and law for electronic business. Digital Transformation turned to be one of the economic criteria of a developed nation; it led

to a growth and proliferation of Internet and multiservice networks, digital business and e-commerce which led to major variations in fiscal operations.

8. A Field Study of the Impact of Digital Transformation on Innovation and Performance in Companies—Nestle Lebanon Case Study

The study aims to identify the status of accomplishing Digital Transformation and its association with innovation and performance, and to highlight the status of accomplishing Digital Transformation through equipment and setups, reliability, responsiveness, assurance and empathy, whereas the degree of achievement attained by the corporation of innovation and performance were identified through its constitutional elements which were clarified in the paradigm of the study and survey form.

In this chapter there will a display of the results of the field study and their analysis; this analysis will be done with the help of the Likert scale which is a psychometric scale commonly used in studies that involve surveys. This scale was created by psychologist Rensis Likert and is usually used in psychology researches in addition to the researches of business and functional behavior. A Likert scale is the sum of responses on several Likert items; a Likert item is simply a statement that the respondent is asked to evaluate by giving it a quantitative value on any subjective or objective dimension, with level of agreement/disagreement being the dimension most commonly used. Well-designed Likert items exhibit both “symmetry” and “balance”. Symmetry means that they contain equal numbers of positive and negative positions whose respective distances apart are bilaterally symmetric about the “neutral”/zero value. Balance means that the distance between each candidate value is the same, allowing for quantitative comparisons such as averaging to be valid across items containing more than two candidate values. The format of a typical five-level Likert item which will be used in this study is:

1) Strongly disagree.
2) Disagree.
3) Neutral.
4) Agree.
5) Strongly agree.

8.1 Historic Overview of Nestlé in Lebanon and Middle East

A Brief Introduction about Nestlé: Nestlé heritage in the Middle East goes back over 80 years to 1934 when the first import operation was set up in Lebanon. Building a foundation of trust among consumers has since made the company the region’s leading Nutrition, Health and Wellness Company. Today, Nestlé owns and operates 18 factories that cater to the region, and provides direct employment to more than 11,000 people, more than half of whom work for Nestlé Waters. Nestlé also provides indirect employment to several thousand more.

The Company Official Rise in the Middle East: The Nestlé Middle East entity itself was formed in 1997, with headquarters in the United Arab Emirates, consolidating the Company’s presence in the Gulf Cooperation Council (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab

Emirates), Levant (Lebanon, Jordan, Palestine, and Syria), Iran, Iraq and Yemen—covering a population of over 220 million.

The Company Investments in the Region and its Significance: with total investments in the region of US $400 million over the last five years, for Nestlé, the Middle East means growth, future potential, talent, and innovation. It also means a challenging business, considering security and political volatility in the region, which reflects directly on the wellbeing of its people.

8.2 The Policy of Nestlé in Middle East

According to Nestlé, the one word that likely sums the region up is “diversity,” because that is what the Middle East is about in every way; home to developed and emerging economies with affluent populations as well as many who have very little; a majority young population mixing with growing numbers of elderly; and completely different cultural demographics encompassing very strong traditional societies as well as very modern lifestyles. It’s also a region of health issues where obesity and malnutrition coexist, sometimes within the same community. Nestlé understands the health challenges of the region and ensures that its products cater to the latest nutrition recommendations for healthy living. Nestlé’s mission is to enhance people’s quality of life with good food and beverages everywhere. In the Middle East, the company strives to do that by offering an array of tasty and healthy products that meet local needs for quality, safety, taste and pleasure—while addressing specific nutritional requirements to help achieve healthy and balanced diets across all life stages.

Nestlé Products in the Middle East: The Nestlé portfolio in the Middle East currently exceeds 60 innovative product brands in a wide range of categories: dairy and infant nutrition, bottled water, chocolate and confectionery, coffee, creamers, breakfast cereals, culinary products, and pet food, among others. Nestlé Nido, Nestlé NAN, S-26, Progress, Maggi, Nescafé, Kit Kat, Coffee mate, Nestlé Cerelac, Nestlé Pure Life, Nespresso and Nestlé Fitness are just some of the brands available in the Middle East.

A Brief Overview on Nestlé in Lebanon: Since the first Middle Eastern import operation in Lebanon in the year 1934, the company established several branches in Lebanon since particularly in the year 1936, the ownership remained foreign. The company is primary interested in food and beverage, and their staff are around 200 person, in addition to a large group of employees related to the company. The company headquarters are located in Beirut Sin Al-Fil Jisr Al-Basha and they have branches in all the Lebanese regions.

9. Investigation Tool and the Population of the Study

9.1 The Population of the Study

80 questionnaire forms were distributed on the personnel of the population of the study (the employees of Nestlé Lebanon); 20 forms were lost and the answers from the remaining 60 forms (75% from the initial forms) were admitted to SPSS (The Statistical Package for the Social Sciences) for further analysis.

9.2 Likert Scale and Coefficients of Correlation

For displaying and analyzing the results of the study, Likert scale was used; this scaleis usually used for measuring preferences and behavioral phenomena in which respondents specify their level of agreement or disagreement on a symmetric agree-disagree scale for a series of statements. In addition to Simple Linear regression that allows the study and summarization of the relation between two variables (in particular, the effect of change in the independent variable on the dependent variable), and the Analysis of Variance (ANOVA): which allows the judgment of whether a survey or an experiment has a statistical significance via a certain numerical value α (Statistical significance when $\alpha < 0.05$ and statistical insignificance when $\alpha > 0.05$).

9.3 Reliability (or Consistency) Test

For validating the ability of using the results of the study, the Consistency test (Cronbach's alpha) was used, this test is famous for how it affects scientific research results through measuring their ability to be disseminated. The test usually accompanies the studies where Likert scale is used to test their reliability. The results are evaluated through a mathematical value α which can be calculated through a formula and the results are evaluated as follows:

- $0.9 \leq \alpha$, Excellent
- $0.8 \leq \alpha < 0.9$, Good
- $0.7 \leq \alpha < 0.8$, Acceptable
- $0.6 \leq \alpha < 0.7$, Questionable
- $0.5 \leq \alpha < 0.6$, Poor
- $\alpha < 0.5$, Unacceptable

After applying the consistency test (Cronbach's alpha) on the dependent and independent variables (Digital Transformation requirements for enhancing performance, Digital Transformation requirements for achieving innovation, Job satisfaction, Digital Transformation obstacles) the results were as follows:

Table 1. Credibility of Quality Management

Variables	Alpha value	Number of corresponding questions
Digital Transformation requirements for enhancing performance	0.886	28
Digital Transformation requirements for achieving innovation	0.869	4
Job satisfaction	0.834	4

Digital Transformation obstacles	0.778	7
The study total	0.868	43

The reliability coefficients as shown in Table 1 ensure that the tool has a high reliability and hence it can achieve the objectives of the study. The highest alpha value recorded was 0.886 while the lowest alpha value recorded was 0.778 and the mean value was 0.868, all those values are above 0.7 hence revalidating the adequacy of the tool.

10. Profound Description of the Primary Variables and Analyzing the Correlation Coefficients

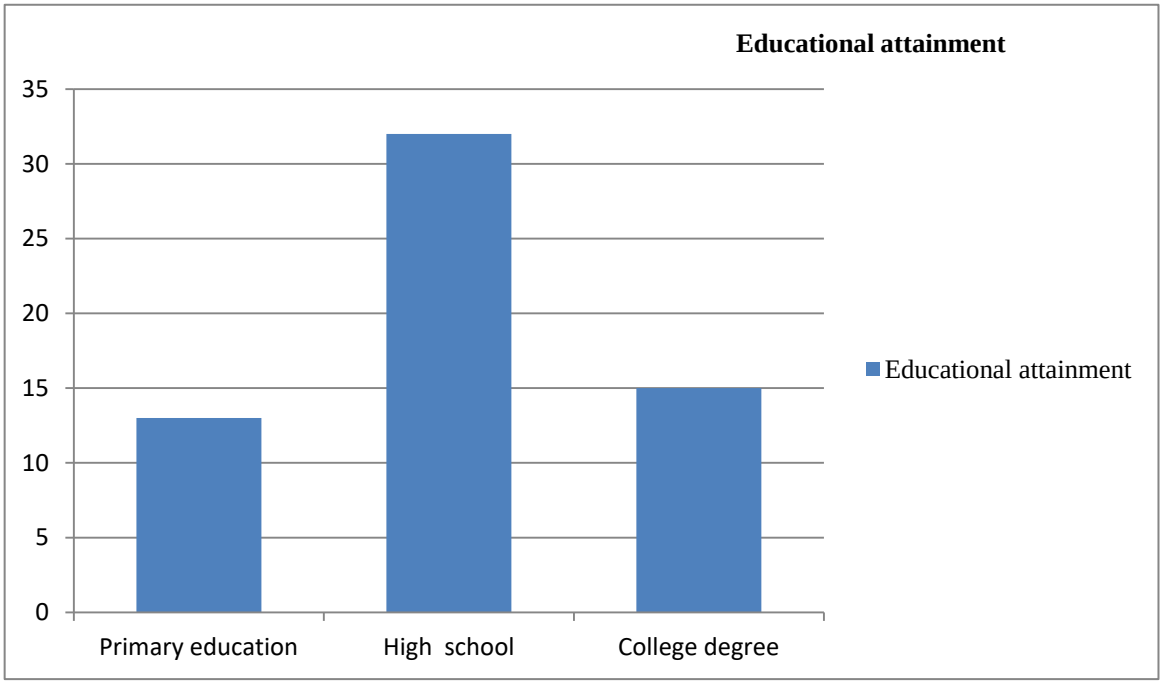

Figure 1. The Educational Level of the Individuals in the Sample

This section focuses on describing the primary variables of the study, with 60 employees participating in the survey between 9 administrators and 51 workers. The Educational attainment level was distributed as follows:

The sample was consisted of 48 males and 12 females and 15 % of the participant did not participate in any training session.

Description of the Requirements for Digital Transformation: This section will describe the requirements for Digital Transformation that are represented by equipment, reliability, responsiveness, assurance, and empathy, as follows:

Table 1. Descriptive Statistics of the Variables

Variable	minimum	Maximum	Mean	Standard Deviation
Equipment	3.83	5.00	4.5777	.23863
Performance	4.09	4.94	4.5132	.20029
Innovation	3.50	5.00	4.4917	.32860
Satisfaction	3.75	5.00	4.5542	.30564
Obstacles	1.00	4.43	1.7787	.56125
Reliability	3.80	5.00	4.5067	.27194
Responsiveness	4.13	5.00	4.5247	.27093
Assurance	3.50	5.00	4.4458	.34164
Empathy	4.20	5.00	4.5733	.21302

Descriptive Statistics: The table below shows the descriptive statistics of variables of the study and the averages, minimum, and maximum for each variable. The moving averages ranged from 1.7787 to 4.5777. It is noticeable that the variable of the obstacles obtained the lowest rate of 1.7787 by a standard deviation of 0.561 which belongs to the class 1.00-1.79 in the Likert scale, indicating the scarcity of obstacles hindering the accomplishment of the Digital Transformation. The variable of the availability of equipment needed to achieve Digital Transformation had the highest rate of 4.5777 with a standard deviation of 0.23863 which belongs to the 4.20-5.00 category in the Likert scale. This means that the staff and personnel of the strongly agree that the company have the necessary equipment to achieve the Digital Transformation. For the performance variable that contains reliability, responsiveness, warranty and sympathy, Nestlé achieved a moving average of 4.51 and a standard deviation of 0.20029 that means that Nestlé performed well according to the sample members as the average belongs to the 4.20-5.00 class according to the Likert scale. Innovation achieved a moving average of 4.4917 with a standard deviation of 0.32860 and thus it can be concluded that most workers feel that the staff has the capacity for innovation. Also for the empathy, assurance, responsiveness, and reliability variables, the moving average of the Likert scale were in the 4.20-5.00 range, indicating that the sample members strongly agreed that these standards were highly present within the company. As for job satisfaction, it received a moving average of 4.5542 with a standard deviation of 0.30564, indicating a high satisfaction of employees within Nestlé. In the next section, the impact of variables on each other will be tested and consequently the validity of the hypothesis will be checked.

Correlations of the Independent Variables: The Pearson correlation coefficient test was used to examine the relationship between the study variables. Table 3 shows that there is a positive correlation between the variables of the Digital Transformation accomplishing namely equipment, reliability, responsiveness, assurance, and empathy, and it was statistically significant as the calculated SIG value

was less than (0.05). This result indicates that these variables are positively correlated to each other and especially the equipment variable with the performance variable as R was 0.762.

The table also indicates a strong positive correlation between the equipment, reliability, responsiveness, and assurance variables as R is between 0.544 and 0.611. There is also a strong negative correlation between obstacles variable and job satisfaction variable as R is -0.727 which indicates that if the obstacles to Digital Transformation are reduced, employee satisfaction increases. There is also a strong positive correlation between the company's possession of Digital Transformation equipment and innovation as R has reached 0.613. Most relationships between variables were statistically significant because the calculated SIG value is less than (0.05).

Table 2. Correlation between the Variables of the Study

Variable	Equipment	Reliability	Responsiveness	Assurance	Empathy	Performance	Innovation	Satisfaction	Obstacles
Equipment Correlation	1	.582	.544	.611	.420	.762	.613	.264	.413
Equipment SIG		.000	.000	.000	.001	.000	.000	.041	0.001
Reliability Correlation	.582	1	.383	.426	.185	.712	.523	.062	-.194
Reliability SIG	.000		.002	.001	.156	.000	.000	.638	.137
Responsiveness Correlation	.544	.393	1	.457	.399	.782	.446	.294	-.392
Responsiveness SIG	.000	.002		.000	.002	.000	.000	.023	.002
Assurance Correlation	.611	.426	.457	1	.201	.785	.521	.308	-.364
Assurance SIG	.000	.001	.000		.123	.000	.000	.017	.004
Empathy Correlation	.420	.185	.399	.201	1	.558	.309	.089	-.168
Empathy SIG	.001	.156	.002	.123		.000	.016	.498	.200
Performance Correlation	.762	.712	.782	.785	.556	1	.639	.278	-.403
Performance	.000	.000	.000	.000	.000		.000	.031	.001

SIG									
Innovation Correlation	.613	.523	.446	.521	.309	.639	1	.077	-.228
Innovation SIG	.000	.000	.000	.000	.016	.000		.557	.082
Satisfaction Correlation	.264	.082	.294	.308	.089	.278	.077	1	-.727
Satisfaction SIG	.041	.638	.023	.017	.498	.031	.557		.000
Obstacles Correlation	-.413	-.194	-.392	-.364	-.168	-.403	-.226	-.727	1
Obstacles SIG	.001	.137	.002	.004	.200	.001	.082	.000	

11. Correlation Analysis and Testing the Hypothesis.

For this purpose and to test hypotheses simple linear regression analysis will be used, this method allows the study and summarization of the relation between two variables (one called the dependent variable while the other is called the independent variable). Also ANOVA (**Analysis of Variance**) was used to test statistical significance differences in the demographic study variables and the results from processing the data gathered from the surveys (questionnaires) at the significance level of α=5% and degrees of freedom of 58 have shown:

First hypothesis: There is a positive correlation with statistical significance between achieving Digital Transformation and enhancing the performance in Nestle Lebanon.

Table 4. Results of the Multiple Linear Regression Test 1

	Model Summary		ANOVA			Coefficient				
Dependent Variable	Correlation coefficient (r)	Coefficient of determination (R^2)	F	Degree of freedom DF	significance F Sig	Status	B	Standard Error	t	Significance Level (SIG)
Performance	0.762	0.580	80.097	1 58 59	0.000	Constant	0.977	0.395	2.471	0.016
						Equipment	0.774	0.86	8.950	0.000

The data in Table 4 show a statistically significant effect of accomplishing Digital Transformation on enhancing performance, with the correlation of coefficient reaching r = 0.762, indicating a strong positive correlation between accomplishing Digital Transformation and enhancing performance. The coefficient determination (R^2) reached 0.580, which means that 58% of the changes in performance enhancement are the result of the accomplishing of Digital Transformation. The meaning of this effect confirms the calculated F value of 80.097 and the significant level (0.000), recorded at a significance level (0.05) and the results showed a strong internal validity of accomplishing Digital Transformation on enhancing performance, as the levels of statistical significance the availability of Digital Transformation equipment by regression coefficients were less than (0.05). Based on the above analysis, we reject the null hypothesis and accept the alternative that states for a positive, statistically significant correlation between the requirements for Digital transformation and Performance enhancement at Nestlé's at a level of significance of α=5%.

Second hypothesis: There is a positive correlation with statistical significance between achieving Digital Transformation and enhancing the innovation in Nestle Lebanon.

Table 3. Results of the Multiple Linear Regression Test 2

	Model Summary		ANOVA			Coefficient			
Dependent Variable	Correlation coefficient (r)	Coefficient of determination (R^2)	F	Degree of freedom DF	significance F Sig	Status	B	Standard Error	t	Significance Level (SIG)
Innovation	0.613	0.376	34.911	1 58 59	0.000	Constant	0.369	0.73	0.523	0.609
						Equipment	0.909	0.154	5.909	0.000

The data in Table 5 show a statistically significant effect of accomplishing Digital Transformation on enhancing Innovation, with the correlation coefficient reaching r = 0.613, indicating a strong positive correlation between accomplishing Digital Transformation and enhancing innovation. The coefficient of determination (R^2) reached 0.376, which means that 37.6% of the changes in innovation enhancement are the result of the accomplishing of Digital Transformation. The meaning of this effect confirms the calculated F value of 34.911 and the significant level (0.000), recorded at a significance level (0.05) and the results showed a strong internal validity of accomplishing Digital Transformation

on enhancing innovation, as the levels of statistical significance the availability of Digital Transformation equipment by regression coefficients were less than (0.05). Based on the above analysis, we reject the null hypothesis and accept the alternative that states for a positive, statistically significant correlation between the requirements for Digital transformation and innovation enhancement at Nestlé's at a level of significance of α = 5%.

Third Hypothesis: There is a negative correlation with statistical significance between the obstacles that hinder the achieving of Digital Transformation and enhancing the skills of the employees in Nestle Lebanon.

Table 6. Results of the Multiple Linear Regression Test 3

Dependent Variable	Model Summary		ANOVA			Coefficient				
	Correlation coefficient (r)	Coefficient of determination (R^2)	F	Degree of freedom DF	significance F Sig	Status	B	Standard Error	t	Significance Level (SIG)
Job Satisfaction	0.727	0.529	65.094	1 58 59	0.000	Constant	5.684	0.128	44.014	0.000
						Obstacles	0.69	0.86	-8.068	0.000

The data in Table 6 show a statistically significant effect of the presence of obstacles on job satisfaction, with the correlation coefficient reaching r = 0.727, indicating a strong positive correlation between the presence of obstacles for accomplishing Digital Transformation and job satisfaction. The coefficient of determination (R^2) reached 0.592, which means that 52.9% of the changes in achieving job satisfaction are the result of the presence of the Digital Transformation. The meaning of this effect confirms the calculated F value of 65.094 and the significant level (0.000), recorded at a significance level (0.05) and the results showed a strong internal negative validity of the presence of obstacles for accomplishing Digital Transformation on job satisfaction, as the levels of statistical significance regression coefficients were less than (0.05). Based on the above analysis, we reject the null hypothesis and accept the alternative that states for a negative, statistically significant correlation between the presence of obstacles for achieving Digital Transformation and job satisfaction at Nestlé's at a level of significance of α = 5%.

12. Conclusions, Results and Recommendations

12.1 Conclusions

After a survey in the form of a questionnaire within Nestlé, it was found that the company was successful in implementing and activating the Digital Transformation; it acquired and successfully functioned the equipment needed for the Digital Transformation, and the sample strongly agreed that there was a significant rise in the levels of innovation and an evident reduction of the obstacles due to the application of the Digital Transformation and this led to employee satisfaction. After some statistical analysis, in the light of the description of the research variables and the analysis of the correlation, the following conclusions can be drawn:

- Nestlé has successfully acquired digital transformation equipment.
- The majority of employees agree on the presence of innovation within the company.
- After accomplishing Digital Transformation, the performance, assurance, empathy, reliability, and responsiveness within the company improved, which confirms the validity of the first hypothesis.
- After accomplishing Digital Transformation, The innovation within Nestlé increased according to the sample, which confirms the validity of the second hypothesis.
- The lack of obstacles toward achieving Digital Transformation increased the job satisfaction of the employees, which confirms the validity of the third hypothesis.

Today's age is the age of digital evolution. This development inevitably reduces time and costs, and achieves greater flexibility and efficiency in the production process. The company's ability to process data and industrial intelligence is significant, and its involvement in this development, rapid access to information and the acquisition and analysis of methods of trading is essential for the development, growth and prosperity of companies, thus becoming more competitive with major market companies. Nestlé was paving its way to be a pioneer in the Digital Transformation domain aiming to the enhancement of its performance. After shedding the light on the status of accomplishing Digital Transformation through the variables of equipment, reliability, responsiveness, assurance, empathy and identifying the extent to which the company is supporting innovation and performance through their constitutional elements, it can be concluded that Nestlé was successful in developing performance and innovation thus contributing in the employees job satisfaction and hence it acquired the economical aspect of a developed nation which leads to Providing new opportunities for the spread of their goods and services, gaining competitive advantage, improving communications and inducing financial changes and other processes.

12.2 Results and Recommendations

- The accomplishing of Digital Transformation within the company is successful and has a positive impact on performance, and the company possesses appliances and equipment that are both modern and up-to-date. Nourishing the capacities of the employees while providing them with the

necessary incentives might be useful for encouraging them to use the equipment necessary for accomplishing Digital Transformation

- Senior management must work to train staff well in the application of digital transformation through specialized training sessions to ensure the proper use of modern and equipment.
- To ensure that the systems and equipment are adequately functional, they must be constantly supported by the necessary software and the Internet to facilitate the staff work by making it more quick and effective.
- The company's digital transformation and its positive impact on its development are important to the public, which benefits management and its employees.
- Incentives to encourage employees to launch new ideas that will enhance creativity and innovation thus improving performance within the company.
- Employees job satisfaction is critical for good performance inside the company hence it is mandatory for the companies to eliminate any obstacle hindering their work.

References

Al Hamdani, M. (2006). *Scientific Research Curriculum*. Amman, Al-Wraaq Publishing Corporation.

Al-Sasquq, A. B. S. (2018). *Digital transformation as a strategic platform for driving economic transformation*. Seminar held in Shaban 1429. Retrieved from https://www.mile.org/images/2018/citc.pdf

Bar, A. M. (2018). *digital transformation technologies*. scientific conference, computer and information technology college, King Abdul Aziz University, Saudi Arabia.

Farhat, A. (2012-2013). *The role of ICT Investment in Sustainable Development*. M. Sc., Algeria, Setif University.

Gadeer, B. G. (2010). *Knowledge Economy*. Syria, Radiation Publishing and Distribution House.

Hassan, R. M. (2001). *Human Resources Management (future Vision)* (Ph.D. thesis). Egypt, University of Alexandria.

https://www.forbes.com/sites/danielnewman/2017/09/26/top-10-trends-for-digital-transformation-in-/#6e827644293a. (2018).

https://www.cio.com/article/3063620/it-strategy/digital-transformation-why-its-important-to-your-organization.html. (2016).

Ismael, A. F. (2003). *Innovation and Development for our Children* (1st ed.). Nasr City: Dar Al-Writers Library.

Ismail, N. (2017, 18 January). *The world is facing new digital demands*. Information Age. Retrieved from https://www.information-age.com/world-facing-new-digital-demands-123464062/

Nestlé Lebanon website. https://www.nestle-me.com/ar/aboutus/history

Nachunlilach, & Srilatazheer. (2002). *MNES in the digital economy*. Working paper, ESRC: center for Business rasearch (UK: university of Cambridge).

Salam, A. (2005). *The new management model in the age of Communications and Information*. Administrative writings on national issues, Part two, a strange publishing house, Cairo.

Turban, E. (2006). *Aland others, information technology for management: Transforming organization in the Digital economy* (5th ed., willeyhigher education). Us, summer.

Ulukan, C. (2005). Transformation of university organisations: Leadership and management implications. *Turkish online journal of distance education*, *6*(4), Article 8.

United Nations Committee of Experts on Public Administration. (2006). *Definition of basic concepts and terminologies in governance and public administration*. M. Porter, Avantage concurrentiel des Nations, Inter Edition, 1993.

A survey directed to the administrative and Labor Organization

Dear Sir/Madame.

Greetings;

Complete your generosity by looking at the attached resolution and answering all questions asked about your opinion on (The impact of digital transformation on innovation and performance in companies—Nestlé case study in Lebanon).

This resolution will be used for scientific research purposes only. We would like you to answer the questions that are attached to you explicitly and with complete freedom.

With great appreciation and respect;

Please check the box that reflects your approval rating for each of the following statements:

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

Digital Transformation Requirements for Enhancing Performance.

Q	Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	Tangibles:					
1-1	The company possesses modern and up-to-date equipment					
1-2	The company's Digital Transformation programs are flexible					
1-3	The company benefits from digital technology to achieve its objectives					
1-4	The company's digital platforms are effective, user friendly and facilitate the work for employees.					

1-5	The company has the latest software and databases needed by the employees					
1-6	The company relies on modern electronic communication Such as email, voicemail, network Internet, telephone...etc.					

Q	Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
2	Reliability:					
2-1	When the staff fall in trouble, the management treatment is gentle					
2-2	The company's Digital Transformation programs are flexible					
2-3	Company leaders play a leading role by facilitating the transformation into a digital organization					
2-4	Training sessions are given by special experts characterized by transparency and objectivity					
2-5	Training staff members are committed to schedules and programs for training sessions					

Q	Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
3	Responsiveness:					
3-1	The company has accurate, error-free documentation and records.					
3-2	Work schedules and possible changes are announced in advance					
3-3	The company has implemented a number of digital initiatives that improve or adapt its products and services					
3-4	Training staff members are always fully prepared to assist					
3-5	The company's staff always meet the needs of					

	the customers					
3-6	The company has a clear roadmap for using digital transformation to help workers achieve goals					
3-7	The company has a clear understanding of how the competitive landscape changes due to digital trends					
3-8	The company has a clear digital strategy/road map with well-defined priorities					

Q	Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
4	Assurance:					
4-1	The behaviour of training staff members is trustworthy					
4-2	Employees can always trust the administrative and training staff					
4-3	Training staff members are friendly and gentle in their dealings					
4-4	The training staff members are independent					

Q	Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
5	Empathy:					
5-1	The company’s employees give personal attention to all customers					
5-2	The communication process is conducted at times that are suitable for all customers					
5-3	The company prioritizes customers					
5-4	The management of the company takes the top interests of the clients into account					
5-5	The company can understand the specific needs of employees and customers					

Digital Transformation Requirements for Enhancing Innovation.

Q	Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
6	Quality :					
6-1	The company has the ability to create and implement new ideas to support innovation					
6-2	The company has well-defined measures to measure the impact of each innovation on the final outcome					
6-3	The company has an automated feeding system associated with its customers					
6-4	The company has self-automation programs to receive orders					

Q	Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
7	Job satisfaction:					
7-1	I am satisfied with my work on digital transformation programs					
7-2	The practical conditions for digital transformation programs are excellent					
7-3	I am satisfied with my working conditions					
7-4	I got all the things that matter to my job after it was digitalized					

The Obstacles of Accomplishing Digital Transformation and its Impact on Employees' Skills.

Q	Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
8	Obstacles:					
8-1	The company's culture of resistance to change.					
8-2	Absence of budgets to engage in digital transformation					
8-3	Limited participation and collaboration between staff and management					

8-4	The company is not yet ready for all technologies					
8-5	Talent gap					
8-6	Change is not easy					
8-7	The company does not participate in cultural and economic exhibitions and events					