



**THE IMPACT OF TOTAL QUALITY MANAGEMENT ON  
INTERNAL GROWTH STRATEGY IN JORDANIAN PRIVATE  
MEDICAL DIAGNOSTIC LABS**

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**By**

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**Supervised By**

*Dr. Ibrahim Yousef*

**A Thesis Submitted in**

**Partial Fulfillment of the**

**Requirements for the Degree of**

**Master of Business Administration**

**At**

**University of Petra**

**Amman-Jordan**

**June/2021**

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## **ABSTRACT (IN ENGLISH)**

This study aimed to investigate the impact of total quality management on internal growth strategy in Jordanian private medical diagnostic labs. To attain the objective of the research, data were collected from 206 out of 270 managers and other employees of two labs in Amman-Jordan. The study considered a questionnaire as a tool of measurement. After confirming the normality, validity, and reliability of the data, the correlations between variables were conducted, and then the hypotheses were tested by using multiple regression.

The results of the correlation analysis showed a strong relationship between internal growth strategy and total quality management dimensions. The results of the multiple regressions analysis showed that there is a significant positive impact of (TQM) represented by (leadership, process management, continuous improvement, customer focus) on internal growth strategy in private medical diagnostic labs in Amman. Finally, this study recommends shedding light on the importance of the interaction of the interest between workers and customers to achieve the requirements of the customers.

***Keywords: Total quality management, Internal growth strategy, private medical diagnostic labs, Jordan.***

## ABSTRACT (IN ARABIC)

هدفت هذه الدراسة الى قياس اثر ادارة الجوده الشامله على استراتيجيه النمو الداخلي في المختبرات الطبيه الاردنيه الخاصه في عمان.ومن اجل تحقيق هذا الهدف, تم جمع البيانات من 240 من اصل 270 من المدراء والموظفين العاملين في شركتين في عمان- الأردن خلال شهر مارس 2021 . اعتبرت الدراسة الاستبيان كأداة للقياس. بعد التأكد من صحة البيانات وطبيعتها وموثوقيتها ، تم إجراء الارتباطات بين المتغيرات ، ثم تم اختبار الفرضيات باستخدام الانحدار المتعدد.

أظهرت نتائج تحليل الارتباط علاقة قوية بين استراتيجية النمو الداخلي وأبعاد إدارة الجودة الشاملة. أظهرت نتائج تحليل الانحدار المتعدد أن هناك تأثيراً إيجابياً كبيراً لـ (إدارة الجودة الشاملة) يتمثل في (القيادة ، إدارة العمليات ، التحسين المستمر ، التركيز على العملاء) على استراتيجية النمو الداخلي في مختبرات التشخيص الطبي الخاصة في عمان. وأخيراً توصي هذه الدراسة بإلقاء الضوء على أهمية تفاعل المصلحة بين العاملين والعملاء لتحقيق متطلبات العملاء.

**الكلمات المفتاحية : ادارة الجوده الشامله، استراتيجيه النمو الداخلي، المختبرات الطبيه الاردنيه الخاصه.**

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Finally, I must express my profound gratitude to my parents, my lovely Husband "ALA" and my fathers in law "Dr-Hani" for giving me the support and continuous encouragement through the years of my study of MBA also I will never forget my lovely family; brother and sisters who kept motivating me all the time this accomplishment would not have been possible without their kind help and backing.

AL-Sharifa Sarra Al-Abdali

# **Authorization Form**

I, Al-Sharifa Sarra Hussein Hazim Al-Abdali, authorize the University of Petra to supply copies of my research to libraries or establishments or individuals wherever is required.

Signature:

**AL-SHARIFA SARRA HUSSEIN AL-ABDALI.**

Date: June /2021

# **Dedication**

*To God,*

*To my amazing parents Hussein & Hind*

*To my lovely Husband “Ala” who is everything for me.*

*Thank you for your endless love, prayers, supports, and advice.*

**Al-Sharifa Sarra Al-Abdali**

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## List of Abbreviations

TQM	Total quality management
HRM	Human resources management
HR	Human resources
ERP	Enterprise resource planning
KM	Knowledge management

# **1. Chapter One: Introduction**

## **1.1 Background**

In today`s competitive environment, the importance of implementing and selecting quality management policies is increasing daily where customers` needs are continually changing and increasingly focusing on the accuracy of the results and the quality of received goods and services. Consequently, to move forward, every company needs to focus on how to deliver goods and services in the best way that meets the needs and expectations of their customers. Various initiatives have been found by researchers in the field such as advanced manufacture technology, total quality management (TQM), total preventive management, six sigma, and lean manufactures. Many researchers even claimed that acquiring new knowledge and skills by enhancing an organization's capabilities would improve the performance of that organization. Accordingly, this research focused on examining the impact of (TQM) implementation on growth strategy.

## **1.2 Context and scope of the research**

TQM takes into consideration the new managerial philosophy and practices which is taken by both services and manufacturing organization. Chen, et al., (2016) stated that (TQM) focuses on developing products and processes to exceed customer expectations through continuous improvement. Another definition was provided by Dale (2011), which (TQM) is a management philosophy for continuously improving total business performance and that it serves as the base for the organization's continuous improvement. Moreover, Long, et al., (2000) have identified leadership, strategic planning, customer focus process management, and people management as

elements of (TQM). Besides, prior research showed that human resources management (HRM) and the creativity in the companies can lead to enhance the functions of the companies and consequently, enhancing the functioning is turning into the main target that leadership and executives are always trying to achieve in some companies. Recently, non-assurance, difficulty, worldwide, and the enhancement of the technology has been improved to the point that it appears to be a major advantage while creativity, improvement, and the ability to solve the problem are the key skills (Hashemi & Dehghanian, 2017).

TQM offers a service that must be efficient internally and effective externally (Talib, 2010). In the current research, the most important dimensions to implement (TQM) are leadership, process management, continuous improvement, and customer focus. Leadership can create values, goals, and systems to improve an organization's performance by satisfying customer's needs and directing the employees while process management controls all the activities to get a high-quality result to meet the customer's needs. On the other hand, continuous improvement needs the effort from each employee in the organization to do the work efficiently at every time, and finally, customer focus that is to keep the organization aware regarding the environmental changes and the resultant changes in customers' needs. As a result, even if the organization meets the expectation of the customers, it must implement some changes periodically in order to provide a high-quality service.

As it is known there are three directional strategies:

1. Retrenchment strategy
2. Stability strategy
3. Growth strategy

. Growth in the company has been recognized as a complex process through studies (Baum et al., 2001) as result the growth can be changed by the time. Growth strategy can reduce production cost, increase the market share and increase in the performance of the objective, (Moreno and Casillas 2007). Growth strategy can be adopted in the form of expansion, vertical integration, diversification, merger, acquisition and joint venture.

❖ Many types of growth strategy as a follow:

1. Internal Growth Strategy.
2. External Growth Strategy.
3. Concentration Expansion Strategy.
4. Integration Expansion Strategy.
5. Internationalization Expansion Strategy.
6. Diversification Expansion Strategy.
7. Cooperation Expansion Strategy.
8. Intensive Growth Strategy.
9. Integrative Growth Strategy.
10. Diversification Growth Strategy.

The success of the companies is to grow their business. There are some different way to grow the business some company focus how to increase the profit, revenue and other financial resources while other focus on increasing number of employees, physical expansion and entering new market all of these depends on the resources of the company (bruner,2004).

Internal growth strategy has advantages such as:

- ✓ It has more control and protect the organization culture and core value.
- ✓ The managers able to understand the assets and their own firms.
- ✓ The internal investment is considered an efficient way and good planned.  
(Denrell, Fang and Winter, 2003; Emefielie, 2008).
- ✓ It can create highly competitive advantages because it cannot be imitated by other firms (Barney, 1998).

Some theories about growth strategies; Miles, (1978) enhanced new theoretical framework to know the problems that the companies may face. While comparable theories (Porter, 1997), their framework support the intention of the business and different aspect of structure, the style of management and process followed ensuing from the different growth strategies were chosen.

This study aims to investigate the impact of (TQM) on internal growth strategy in order to increase the focus of the organization on how to develop and grow their business through analyzing the environment to respond faster to the changes as different internal growth strategies may need different resources and different performance implications.

### **1.3 Problem statement**

Recently, the literature has paid more attention to the importance of (TQM) in the companies from the point of view of the employees, the organization's development, and the customers. The pandemic of Coronavirus disease has spread too many countries, and as we know the healthcare workers have a higher risk of infection and death due to excessive COVID-19. Accordingly, strong procedures and deep changes have been applied by all the labs to protect their employees and protect themselves, which increased the competition between the healthcare labs to provide the best services and results to their patients, therefore they tried to generate the most important competition in expense, value, period/speed, and elasticity. From the interviews with many managers and other employee working in medical fields in the purpose of determining the problem of the study, these labs face difficulties related to internal growth strategy. It was obvious that they are looking over a lot of competition, such as hyper-challenging and the continued rapid spread of the disease which changed their lifestyle and their systems inside the companies.

As it is known, Covid-19 is both an opportunity and a challenge for certain businesses right now. Thus responding to the changes in the external environment, rapid technological improvements, and a creative high level of competition between the companies are the main responsibilities of the management team. Moreover, meeting the needs and expectations of the customers is turning into a priority with high importance. Besides, the responsibility of expanding the business by the necessary resources such as money, time, labor, and others to survive and achieve competitive advantages. On the contrary, other companies failed to meet the challenge of

customer's needs due to lack of knowledge and control, in fact, this is the reason why (TQM) is concerned as a backbone of the development in the organization. Therefore, this study aims to determine the improvement of TQM and its dimensions on internal growth strategy in private medical diagnostic labs in Amman-Jordan.

Various studies have reviewed (TQM). According to Goetsch and Davis (2016), (TQM) is a recommendation with an approach to do by the business that seeks to increase their competitiveness through a continuous improvement of the quality of products, services, people, processes, and environments. Likewise, Haile & Raju (2016), mentioned the impact of implementing (TQM) and specified its most successful factors which are: top management leadership, customer focus, supplier quality management, people management, process management, and continuous improvement. While, companies that do not incorporate complete quality control, according to Sari, 2015 might lose their competitive advantages.

#### **1.4 Significance of the research**

The significance of this research that investigates the concept of TQM and highlighted it's importance to various labs. Some points summarize the significant of this research:

1. This study could be considered as the one study of its kind in the private medical diagnostic labs industry in Jordan, as it investigates the impact of (TQM) on internal growth strategy in private medical diagnostic labs.
2. This research would be benefit not only for the employees who works in private medical diagnostic labs only but also to other employees who work in other industries.

3. This research will guide the labs to see the importance of (TQM), in achieving their goals by the of every employee.
4. This research highlights the importance of leadership, process management, continuous improvement and customer focus on internal growth strategy in private medical diagnostic labs in Amman-Jordan.

### **1.5 Research objectives**

The purpose of this research is to examine the impact of (TQM) on internal growth strategy in private medical diagnostic labs in Amman-Jordan. The research examined (TQM) in terms of four dimensions, Leadership, Process management, continuous improvement, and customer focus. Therefore, this research aims to achieve the following objectives:

1. To test the importance level of (TQM) dimensions (leadership, process management, continuous improvement, and customer focus) on private medical diagnostic labs in Amman-Jordan.
2. To measure the improvement of internal growth strategy on private medical diagnostic labs in Amman-Jordan.
3. To investigate the impact of (TQM) on internal growth strategy in private medical diagnostic labs in Amman-Jordan.

## 1.6 Definitions of the terms

It is important to identify the considered variables and the dimensions in order to be able to calculate them accurately in order to achieve the objectives of this research, and the procedural meanings to be considered for the purposes of this research are as follows:

**Total quality management:** TQM is a management philosophy, it is a tool to do the business through continuous improvement of the product and process in order to achieve that business including quality of its services, processes, employees (all levels), and environments.

**Leadership:** the person who influences others by the relationship between all the managerial levels to achieve their goals and monitoring the continuous process.

**Process management:** improve the business process to be more efficient and effective by analyze the current situation and find optimal solution.

**Continuous improvement:** improve the service and works by finding new methods to increase the productivity, reduce time and errors.

**Customer focus:** focus on understand the customer requirements to meet their needs and expectations.

**Internal growth strategy:** use internal resources to grow within the organization. It focuses on improving new product, increasing the efficiency, recruiting right employee, entering new market, etc.

## **1.7 Research questions**

What is the impact of (TQM) on internal growth strategy in private medical diagnostic Labs?

Sub questions:

1. What is the impact of Leadership on internal growth strategy in private medical diagnostic labs?
2. What is the impact of process management on internal growth strategy in private medical diagnostic labs?
3. What is the impact of continuous improvement on internal growth strategy in private medical diagnostic labs?
4. What is the impact of customer focus on internal growth strategy in private medical diagnostic labs?

## 1.8 Research hypothesis

The problem questions can be answered by the following main hypothesis:

H0: TQM has no significant effect on internal growth strategy at  $\alpha \leq 0.05$ .

The main hypothesis can be divided into the following sub-hypothesis:

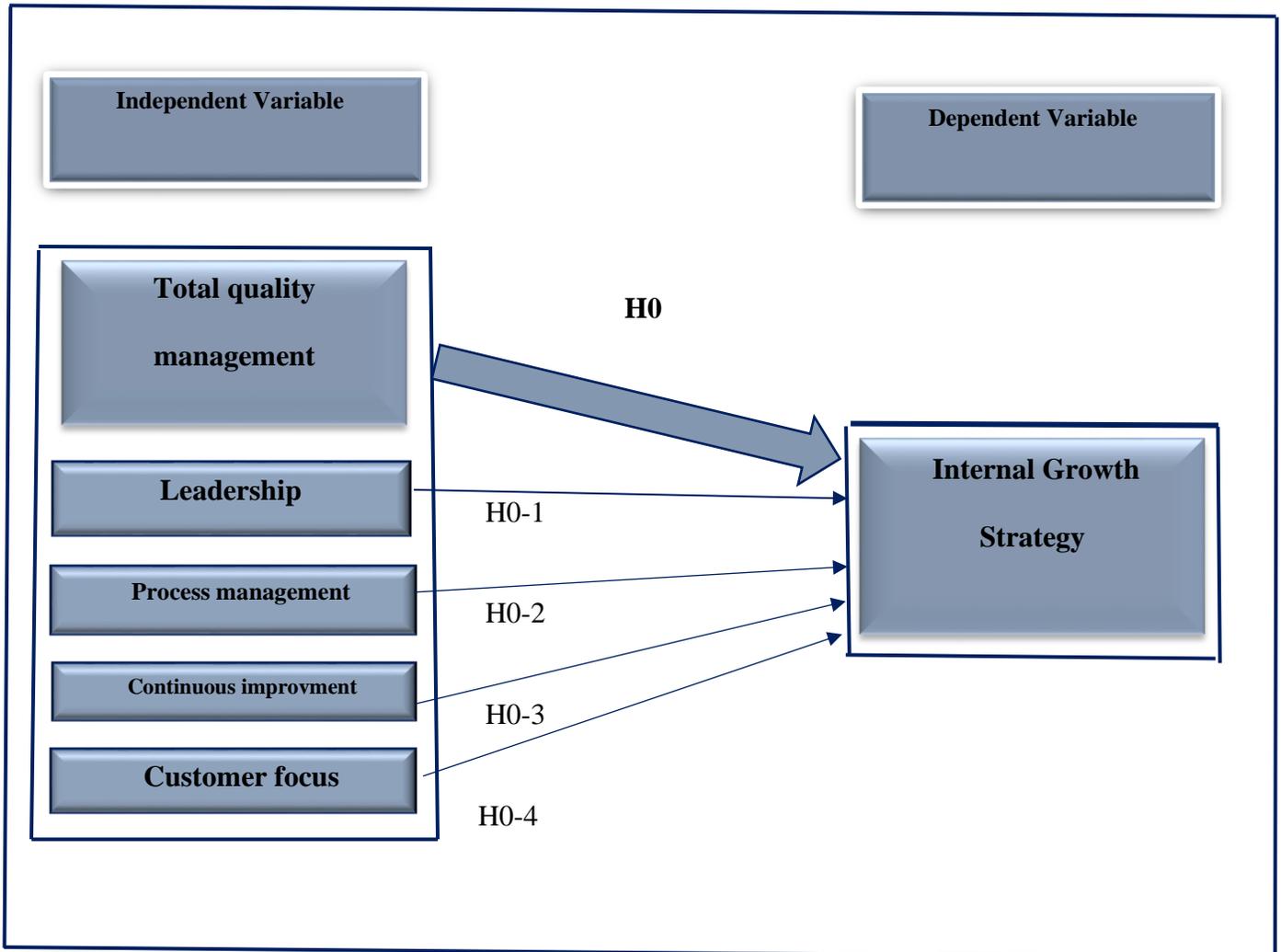
H0.1: Leadership has no significant impact on internal growth strategy at  $\alpha \leq 0.05$ .

H0.2: Process management has no significant impact on internal growth strategy at  $\alpha \leq 0.05$ .

H0.3: Continuous improvement has no significant impact on internal growth strategy at  $\alpha \leq 0.05$ .

H0.4: Customer focus has no significant impact on internal growth strategy at  $\alpha \leq 0.05$ .

## 1.9 Conceptual framework



**Sources:** This model is based on previous studies (Talib, 2013; Mahmood and Ahmed, 2014; Long, et al., 2015; Singh, Kumar and Singh, 2018; Deraz and Gebrekidan, 2018).

### **1.10 Limitation of the study**

**Human limitation:** This study carried out all the managers and other employees of all levels who work at the private medical diagnostic labs in Amman, Jordan.

**Time limitation:** The study was carried within the period of academic year 2020/2021.

**Place limitation:** the study was applied to private medical diagnostic labs which include only Bio-labs & Med-labs.

## **2. Chapter Two: Literature Review and Previous Study**

### **2.1 Background**

This chapter is to cover the related theoretical and previous studies as follows: firstly the definition of (TQM) and the study variables are presented according to literature and previous studies, then main elements of (TQM) are explained, after that the internal growth strategy and how it can be impacted by (TQM) which has been a major concern and challenging topic among researchers. Then the previous studies, and finally, the contribution of the research.

### **2.2 Total Quality Management**

Different authors have suggested various definitions to the concept of (TQM), however, all of them are supporting the same idea and almost having the same definition. According to Deming (1986), TQM is the philosophy of the management to satisfy the customer requirements and meet their expectations. Nicol (1997) defined TQM as a total system approach that works over the departments and corporation levels. Miller (1996) mentioned TQM it is a process that the top management do the requirements to enable the employees perform all the duties to achieve the goals which meets the requirements of internal and internal customers.

Other researchers define TQM for instance, Zhang, et al., (2000); Yusof & Aspinwall, (2000) and Arumugam, et al., (2008) have mentioned (TQM) is an executive viewpoint that provides the company with all the effective and efficient performance to reach the quality internationally. In the same context, Gharakhani, et al., (2013) specified that (TQM) was largely agreed at various services as the managerial strategy that essentially aims to enhance the

company's performance. In addition, (TQM) was defined as the combination of the entire departments and activities within the company to accomplish continuous enhancement of the quality (Valmohammadi & Roshanzamir, 2015). Another key definition to include is that (TQM) is considered as a management perspective that communicates all managerial activities such as engineering, manufacturing efficiency, marketing, and administrative work to produce a quality result (Aized, 2012).

TQM has played an increasingly important role in managerial policies in recent years with the main purpose of the concept is to maintain and support continuous improvement while satisfying costumers' expectations below the principle of management (kim, et al., 2012). According to Abbas (2019), from a whole management perspective, (TQM) in all parts of the company aims to achieve continuous improvement and it is unique in that it places a high value on long-term sustainability (Li, et al., 2018). Furthermore, the range of sustainability is able to expand and improve from the economic aspect of sustainability to community and environmental forms (Singh, et al., 2018). Besides, it has the direction to enhance the outcome of the company through encouraging the growth of resources which are precise, deep knowledge of the culture of the company, establishing a social network with a large number of relationships, and creating knowledge in particular the knowledge of tacit (Maravilhas & Martins, 2019). Consequently, (TQM) must improve their product quality and services with minimum consumption resources usage to get a high level of customer satisfaction (Qasrawi, et al., 2017). TQM greatly improved the capabilities of the individuals to create new outcomes or enhance the outcome of the existing products or services (Shafiq, et al., 2017). Moreover, the advantages are enhanced quality, sharing of the employee between them, teamwork, the relationship of the work, customer needs and wants,

employee`s wants and needs, the outcome, and market share (Ahmad, Zakuan, Jusoh, & Takala, 2013).

Some researchers were having specific viewpoints while studying (TQM); presented by Abd-Elwahed & El-Baz, (2018) tried to measure the level of awareness of applying (TQM) tools in Saudi Arabia. About Ozdal & Oyebamiji, (2018) reasoning of their research, was to apply (TQM) and its impact on employee`s performance in Oyo state hospital in third level technique. The important external factor affecting employee`s performance in the hospital was the financial and political pressure, as well as enhancing activity, productivity, revenues, and flexibility of hospital services offered to patients. Whereas Zakuan and Zahari, (2016) study were about the relationship between (TQM) and the outcome of the employee in the Malaysian production business. Their focus was on the importance of elements of the individuals in the company of their outcomes and results.

Cho (2017) stated that TQM has a method and uses it to minimize tolerance as an output method; thus, Esaki (2016), suggested that the common TQM process management pattern is based on case analysis. Implementing (TQM) will raise quality as a total and enhance the business outcome in service (Haque, 2014). Moreover, Gambi et al. (2013) clarified that many companies were concentrating on quality management strategies in order to improve quality and outcomes.

From another point of view ul Hassan, et al., (2012), the main success for executives is that when they use (TQM), the business gets better results in terms of customer satisfaction, and the correlation between employee, quality, and company outcome. Thus, research made by Mustapha (2011), found that effective (TQM) in the SMMEs relay on a long-range viewpoint. Whereas

Kumar, (2011) mentioned the most important (TQM) practices in Indian pharmaceutical manufacturing and the six elements that influence the application of (TQM) which are: executive commitment, leadership, quality administration, workout of people, customer requirements, and supplier quality.

In summary, total quality management (TQM) is known as a management viewpoint, and a technique toward enabling the company to achieve continuous improvement involving the quality of services, quality of the process, all levels of employees, and environment, etc.

### **2.3 Total quality management dimensions:**

Various past research looked a diverse number of Total quality management (TQM) factor. To start by, Flynn (1994), recognized seven quality management dimensions, which contains quality system of information quality, engagement of the customer, employee organization, support of the executive, the participation of the holder, design of the product and the organization method. Yet, previous research identified quality management structure considering Deming's 14 Points (Dabestani et al., 2017). While Wong (2018), applied four dimensions of quality management and Jabeen, (2015), used three elements of the special structure.

Sari and Firdaus (2015) identified the following independent variable of (TQM) (requirements of the customer, quality premonition, method of the scientific, involvement of long range, collaboration, continuous improvement, teaching, independence of the control, the objective, and participation of the workers). Also, Long (2015), used in his research the following

independent variables of (TQM) (the command employee, the organization strategy, customer requirements, the administration of the procedure, and worker administration).

An analysis of the importance of (TQM) elements including (continuous improvement, customer satisfaction, and teamwork are the most critical factors in manufacture and service industry) was presented by Kumar, (2011). While (TQM) elements showed a positive impact on the performance of the hospitals in Palestine according to sabella and omarn, (2014) were the most significant factor is evaluation process, data collection, process executive and individual's executive amongst another factor.

According to the area of research style and reviewing the different dimensions to measure TQM in the literature, so this study chose the most widely used from previous studies (leadership, continuous improvement, process management and customer focus) as a dimension of TQM.

### ***2.3.1 Leadership***

Leadership is defined as an interactive process that affects the individual to accomplish the goals of the business (Essa, 2018). Al-Damen (2017), mentioned that leadership is the main element that allows power to TQM. Moreover, Nurhayati and Mulyani (2015), stated that the leadership means the sharing of leadership and the organization's quality improvement efforts. Top managers must have different abilities and talents to decide the best strategy of the best alternate such as low-cost direction, innovative training, divergence strategy, production, and particular development of the brand (Lin, Chang & Dang, 2015). Thus, Abu bakar (2015), leadership support is found to be the most essential factor of innovation. A high level of view of leadership is a key achievement of (TQM) implementation (Alolayyan, et al., 2011).

Organizational performance and employee performance have earned greater attention by profit or no profit companies. Besides, leadership is interested in knowing the main factor which enables employees and organizations to make the best decision for better performance (Alenezi & Tarhini, 2013). While Bitmiş and Ergeneli (2013), argued that each worker in the company can be effective in their outcome. Accordingly, by teaching and training, the outcome of the worker can be enhanced and the target of the company could be achieved. in the same context Youn (2013), discussed that the influence of information sharing with quality and accuracy between supply chain partner could be achieved by mutual trust, organization compatibility, and leadership, as a result, the well-trained employee will satisfy customer wants and needs (Gul, et al., 2012).

According to Amankwaa and Anku-Tsede (2015), leadership is an operation of encouraging the employees to accomplish specific responsibilities to do the administration objectives. To accomplish the objective of the business, leadership support and give the appropriate level of incentive, inspiration, and rewards (AlHummadi, 2013). Thus, successful leadership impact the satisfaction in work, the positive interactions, the trust level, the management of knowledge, and the enhancement of the outcomes (Sankowska, & Paliszkievicz, 2016).

the most essential elements that impact innovation is the characteristic of leadership and staff, also the features of the leadership and the staff, Additionally, the culture of the business that encourages innovation, the assets of the company, the overall government of the environment, the environment of the community, and setting of the practical (Gambatese & Hallowell, 2011). In summary leadership means facilitates employee empowerment to ensure the needed resources to foster the quality, to rewards and evaluate the employees based on the quality indicator.

### **2.3.2 *Process management***

Process management is the analysis, redesign, and improvement of existing process to get a high level of competitive advantages in operation, the implementation through the program can help in understanding the needs of the company and the necessity of the transformation (Javidroozi, et al., 2019). Process management is the most common business practice nowadays, which is discussed in both company areas and by the culture of the scientific, accordingly, digital transformation can highlight the significance of process management while enhancing digitations (Martinez, 2019). Process management is considered as one of the greatest significant elements that indicate the degree of achievement in the application of ISO 9001 (Chountalas, 2019). Moreover, Process management is a process that directs to improve the methods and ways to minimize the forces needless in the procedure of the manufacturing practice (Upadhyai, et al., 2019).

Latest scholars have classified the viewpoint of international quality management, as well matched to the requirements for inter-managerial and process management (Bashan & Notea, 2018). As a result, when employees choose to enhance their knowledge, proficiency, and practice through academics, engaging in new information when it comes to change is a good idea. (Rafailidis et al., 2017) therefore, the obvious process section, duties, aims to satisfy the best outcome design, monitor the process, and proceed with the enhancement by own-checking and using an automatic machine.

Total quality management (TQM) focuses on process management to transfer high-quality products that satisfied the customer needs and expectations (Wakchaure, 2014). The improvement

of structures relies on process management and it is essential to get all the processes in accurate request. Enterprise resource planning (ERP) has a key role in the application of process management strategies (Malik & Akhtar, 2017).

Franz and Kirchmer (2012), mentioned that process management involves proceeding executive supports to realize the qualification and guiding the quality, innovation and accomplish the basic strategy of the company while Seethamraju (2012), mentioned that the fundamental viewpoint basis of process management is linked to (TQM) that it generalizes usage of the company administration, the technological knowledge, and the technique of management of the quality. Moreover, Process management assured actions that showed a result, by a group of methods and social practice (Burli, 2012).

Process management shows a significant role in the implementation of new output procedures. Implementing process management in the medical care service, improve the process obtained from systems and enhance the medical skills (Alolayyan, et al., 2011). Additionally a process of connection of actions that have time frequent it is aimed to generate worth to internal or external customer (Bergman, 2010). In summary, process management means that the company pursues excellence and how they encourage innovation and creativity for process improvement.

### ***2.3.3 Continuous improvement***

Continuous improvement is known as the strong point of quality, and it includes five elements, which are the core of the procedure, client attention, empowerment of the worker, data-based decision making, and company wide-ranging scope. Additionally, there are three different

reasons for the successful quality improvement, which are: top management, strategic orientation, and loyalty to any changes in culture (Alolayyan, et al., 2011).

Continuous improvement is Categorized by repetitive utilize to know the problem of the quality, enhance the resolution, and adjust any changes that will occur. The use of continuous improvement in medical care is developing continuous achievement (Bailie, 2017). The goal of TQM is to enhance the quality of products and services to increase client fulfillment (Qasrawi et al., 2017). Al-Damen, (2017) declared the continuous improvement means finding new tools techniques to increase product value, raise the level of outcome, accomplish competitive advantages, also raise their client expectation. Whereas Antunes (2017), claimed that continuous improvement encourages creativity between the employees. Continuous improvement has been implemented in various states across Sub-Saharan Africa, to increase the value of primary care (Bhardwaj, 2014). Moreover, Sadikoglu and olcay (2014), mentioned that (TQM) is a way for the company to achieve the goals and increase the level of business competitiveness via the continuous improvement of the quality of its service, process, product, and employee.

However, TQM is a management system that focuses on continuous improvement by devices, technique, plus value (Mahmood et al., 2014) so it is incorporated potential toward earn and maintain the best value of the service based on continuous improvement repair of process and minimize errors that occur in all departments of a company, the goal is to raise the expectation of the customer requirements (Gimenez-Espin, 2013), thus Continuous improvement is a particular group of routines that support the company to improve performance also, it has a positive impact on repair outcome (Maletic, et al., 2012).

According to Johnson (2018), continuous improvement focus on the enhancement of health medical workers' ability to enhance the quality of care. This requires a group of flexible individuals, even though the process is technical, to determine any problems by using real information at the right time, so the most focus in primary care on quality improvement is significant since a primary care visit is considered to be the first with only contact individuals have with the local health system when requesting care (WHO, 2018).

Appearing in both the manufacturing and maintenance industry, continuous improvement is concerned the best advantage part to promote success, efficiency, value, and accomplishment (Li, 2016). If the managers have high quality with process management then each employee has high quality-oriented (Majstorovic, et al., 2016). Moreover, Psomas, et al., (2014), tested food companies in Greece and found that TQM practices such as continuous improvement engagement of the workers have a direct impact on organization performance which consists of quality improvement, employee benefit, and customer satisfaction. In summary, continuous improvement means monitoring all the processes continuously and enhance the process by using suitable tools for internal operation and depend on feedback for further improvement.

#### ***2.3.4 Customer focus***

Every company needs to identify the customer needs, take the requirements of the customer to exceed their expectation (Ahmad, et al., 2019). Thus, leadership and customer are very important responsibilities to promote worker abilities and company growth internally (Abu-Mahfouz, 2019). Consequently, to determine customer requirements, the most substantial issue is service quality for the company's existence (Endara, et al., 2019). In essence, it is essential to be

conscious of a lack of individual. On the other hand, this increases the client's satisfaction. The requirements are a desire that is influenced by cultivation, organization, and a person's attitude, it distinguishes between two types of desires: real wants and psychological want (Camilleri, 2018).

Evans (2017), stated that the company always tries to identify the existing and upcoming customer wants as well as attempts to raise the level of the customer expectation. Private medical diagnostic labs face a lot of competition, which is accompanied by creative needs such as client dissatisfaction, an increase in the cost of medical employment, and a decline in the amount of return hire (Ovretveit & Al Serouri, 2006). While these strength elements in private medical diagnostic labs to enhance and take over a framework that satisfies the needs, doing the right things with any changes that may occur, modification of knowledge, raise the expense in medical service, raise the challenges, and satisfy the clients wants and needs (Alolayyan et al., 2011).

The best essential key for success is customer focus according to a study by Dedy (2016), that aimed to evaluate the correlation of total quality management (TQM) practice, process innovation, and employee satisfaction which is known the essential successful elements to the outcome of the workers in addition, the study aimed to discover the impact of process innovation mediator of (TQM) practice on the outcome of the workers. Goetsch and Davis (2016), mentioned that the customer is the driver in total quality thus they mentioned that the clients need to be studied well through the communication with the workers to figure out the attitude of the clients after they take the product or the service from the company also known the happiness and the pleasure of the customer (krystallis, 2014). Nevertheless, a few scholars discussed that the client commitment is an essential factor for the challenges thus the pleasure of the client after purchase is not related to the level of the commitment (sayani, 2015).

The focus of the customer is considered as the most important factor of (TQM) that impacts the financial and operational accomplishment (Abusa and Gibson, 2013). While Al-Bourini, Al-Abdallah, & Abou-Moghli (2013), reported that the internal customer is the person who works within the company, while the external customer is the individual that uses the company's services and fulfills their wants and needs. In summary, customer focus refers to the correlation of all attempts to persuade the customer's desires, needs, and expectations.

#### **2.4 Internal Growth Strategy**

“Theory of the growth of the business” presented by Penrose’s (1959). Kor, et al. (2016), explained that every business needs to know the resources dependent then for the growth prospective the most significant contribution of Penrose consider resources as the engine and the constraint on the growth of the companies, so every company needs to meet the growth strategy by purchasing new products, entering new markets, and improving their technical capabilities. The choice of internal growth strategy is complex for new companies due to a lack of resources and environmental uncertainty. Internal growth strategy is important in a company to reach its goals although the definition of growth strategies has not yet been reached by many opinions.

Companies depend on how to assess the progress and expansion of their operations as a result of the growth strategy's implementation. Thus, in order to reach new markets at any point of a company's growth, it is critical to establish a company strategy that takes into account both national advantages and product features. In a complex, this offers a broad range of options for entering new markets, adapted to the strengths of a specific business, so that when the company needs to implement growth strategy is important primarily for the company's management and, as

a result, its owners. After obtaining the results to the owners' objectives, one may proceed to the reasoned actions associated with the quest for additional opportunities to increase the productivity of the operation and evaluate the business's boundaries (Szymura-Tyc M). On the other hand, Baltina, Bolodurina & Gorbatenko (2018), developed a model of the company's growth strategy, which make it possible to evaluate the choice and likely ways of entering the company into new markets moreover the business environment study could discover the factor like, environmental competitiveness and abilities of the company`s to grow (Głodowska, et al. 2016). However, the company must have a high standard of seeking abilities in order to be prepared to face any risk and must have an appropriate reaction to take a chance on being recognized as market internationalization (Cui et al., 2011).

In condition, businesses often require strategies such as cooperative and competitive, besides the process of decision making to enhance the output and meet business or segment of the market (Wan Yusoff, Jia, Azizan & Ramin, 2015). Accordingly, so many scholars arguing about that the strategy of the business can be implemented by SMEs or different domain in business to develop and grow their business additionally, various companies have their various objectives and needs, therefore various types of business can formulate and develop their business to expand globally (Zakaria et al. 2016) moreover, the company in common can also have the competitive require such as prospective entrants, products alternative or services, prospective buyers, and suppliers, besides, the industry of the competitors think of the business location (Wan Yusoff et al. 2015).

The organization consider growth strategy as a part of change management, so it is affecting the operational scope and financial performance of the firm`s (Skalik, 2016). Growth of

a company includes transformation their system of the business, so it requires applying the transformation strategy which is considered as the main term of inner company society, according to Skalik (2016), while Muogbo, (2013), concentrate on the impact of growth strategies on structural growth in addition enhancement in Anambra State of chosen business companies, it is pointed that growth strategy has an important impact on competitiveness and business companies like the competitiveness of the workers plus the outcome of the firms of business company. However, the result of the study done by Mokhtar (2013) showed that the greatest company strategy taken by the company's holder to grow and develop their company is the method that the company's holder wants to grow dimension and area of their company. However, some researchers argued about this strategy which is considered unsuitable because of environmental changes and economic pressure that will delay the expenses (Mokhtar, 2013).

Wilfred, Bernard, & George, (2014), choice of strategy type to pursue may often be a critical decision related to the company's long-term viability, but the most recent results showed that internal growth strategies have a greater positive impact on the company than external growth strategies. While Banabo & Koroye, 2012 and Insalaca, (2017) conducted a study to investigate the correlation between the development of the product and the profit of the company. The result of this study mentioned that there was a major correlation between the development of the product and the profit of the company, so this causes a positive impact of the diversification on the company's outcome. While an analysis by Insalaca's (2017), of the beverage and food industries discovered strong evidence that internal growth strategies have a positive and diverse impact on the outcome.

There are two ways to grow the firms, the first one is by expansion internally and the second one is by integration. To grow internally means that the firm needs sufficient profits for purchasing new assets that including new technology. Over time, the assets of the firm`s will increase so it allows the firms to borrow to fund further expansion (Miriam 2006).

Internal growth strategy it can expand the operational of the organization by diversification, increase the capacity, growth of the market, etc. these strategies are classified into:

1. Intensive growth strategy

This strategy has basic classification which are market penetration, market development, and product development (these strategies also called organic strategies).

2. Integrative growth strategy

This strategy focus on increasing sales, assets and profits so basically it has two variants of strategy: horizontal integration (same level, same industry) and vertical integration (different level and same industry).

The vertical integration can be backward integration or forward integration.

- a) Backward integration: the company can expand backward by extend to the suppliers of raw material.
- b) Forward integration: it extends to the business that sell to the consumer.

3. Diversification growth strategy

This can be going to the operation of the company so it can be totally or partially unrelated to the current operation.

Internal growth strategies are a physical way for the company to develop, enhance, and raise the level of the outcome. Internal growth depends on the assets in the company in order to derive from the development of all the process in the company, therefore, internal growth strategy could raise it is outcome and their property besides, it could raise the amount of the workers (Dalton & Dalton, 2006; Penrose, 1959). Furthermore, the internal growth strategy recognizes more than just an outcome; it necessitates long-term action that stems from the entire phase of developing profits, workers, and expenses. Developing within the company can have a high return due to less pay not only for the profit of the company but also for the requisition of excellence. (Ahuja, Segel, & Perrey, 2017).

There are two theories that support the internal growth strategy. The first theory is called transaction cost theory and the second one the resource base view.

1. The transaction cost theory, which assists the researcher in determining and comprehending the reasons why the organization wishes to extend various operations from the external world. This theory is used when a company decides to maximize its profit, then it must analyze the market to determine what the demand is like and the accuracy of the product. With that information, the company can concentrate on allocating resources to ensure that they achieve the managerial goal of increasing the company's size and growth (Marris & Mueller 1980).
2. The study of the Penrose depends on tangible and intangible resources led to the resources-based viewpoint. This study's perspective is focused inside the organization in the expression of assets, expertise, and abilities (depending on rare and special abilities) that may be concealed. It is recommending that there is a difference in the

outcome of the business belonging to has fewer assets than its competitors where the leaders of the strategy determine the unique capitals of the company to have a high level of worth and maintain the location of the market, and if many companies have the resources after that will be remainder of the resources costs and abilities that applying the strategy is a should (Adekoya & Razak, 2017).

In general, examining the abilities and capital of the company require merging natural, social, interpersonal, and resources of the community plus technical and economical assets (Savolainen & Lopez, 2013). The business's strategic resources such as physical resources and (HR), are to increase competitive advantage over other companies and achieve more performance (Shahmansour, Esfahan & Niki 2013). In addition, the internal growth strategy is clear and less able to be defined since they are not working derive from the assumption of the agreement (procurement, asset, or partnership. Thus, holding and grouping internal growth keen on a particular group of strategy is an unresolved challenge through the literature of the academy moreover, the driver of the internal growth strategy which is considered as the major role in marketing and the concentrate happens on market and product growth as the major defined of internal growth strategy (Lynch, 2006).

Internal growth strategy research is most likely in small businesses and new companies. They are focused on identifying a factor that has an impact on the growth. In other words, research on external strategies is concerned with large corporations (Achtenhagen et al., 2017). While Indonesian manufacturing industry noted an increase in large and medium industry and small and micro-industry in (2017) by Central agency statistics or Badan Pusat statistic. Rather, Leminen and Westerlund (2012), define growth strategy to achieve the objective of the company to raise

the bulk of the company, the action inside the company, and sales rotation. Nowadays the definition of growth strategy is to achieve new objectives at a higher level than the previous. Growth strategy aimed to grow their company operation by market penetration, market development, diversification and product development. In general, evaluating the abilities of the company and assets it is purpose to natural integrating, individual, social, and capabilities of the company plus technological and economical assets (Yitmen, 2011).

Market penetration happened when a company had an existing product and entered the market, doing so by acquiring the competition's customers. To gain market share, a company must take non-clients or certain existing clients to get an extra product or reveal the existing product to get extra return, whereas other analysts suggest market penetration so that the business does not attempt to pursue the target clients, but must rely on the trademark name with a large number of current market clients (Ansoff matrix). According to Wainaina & Oloko (2016), research about market penetration strategy and the expansion of the company in the soft drink, the result showed that there was a correlation between market penetration and the expansion of the company. Additionally, the pricing has a negative correlation to the company's growth. So, all the market penetration strategy is an important key for company's growth.

However, market penetration in this technique, Bio-labs and Med-labs consistently increases revenue and profits. Encourage customers to remain loyal to Bio-labs and Med-labs. The successful technique used by Bio-labs and Med-labs has a low cost for attracting additional clients than other competitors, apart from increasing the number of clients by using the trademark name best than the competition.

If the company chose to create something creative in products or enhance by adding something different to the existing products and focus on the current client is called Product Development. (Ansoff matrix). However, in order to maximize its sales, Bio-labs and Med-labs go through the process of researching the market in order to be innovative with new products and/or improve existing ones. Bio-labs and Med-labs are attempting to increase the distinction of goods that appropriate all of the parts in the business in order to be marketable. Bio-labs, for example, has a vein-viewer tool, which is a visualization product designed to provide clinicians with an accurate picture of patient veins. This product is primarily used on newborns and the elderly

Koks & Kilika (2016) considering the strategy of development of the product and the outcome of the company a relationship between the strategy of the development of the product and the outcome of the companies could be observed. Both researchers supposed that if the company will invest so the result might be a positive correlation between the development of the product and the outcome of the company. This study clarified the fact that development of the product has an impact on the outcome of the company, the correlation rely on the public parts in the market while, Mbithi, Muturi & Rambo (2015), in their study in Kenya on the influence of product development strategy in sugar company found that the development of the product has important impact on performance in the phrase of usage of the capacity in particular when the company wants to develop the new product while enhancing existing product has no significant impact in the sugar company. Thus, the conclusion of this strategy that if the company wants to develop their product, they must study well their industry and see if it will be appropriate since successful use of this strategy does not consider working routinely in different manufacturing. Moreover, Obonyo

(2015), stated that Safaricom limited has adopted different growth strategies to develop performance. Besides, the study concludes that Safaricom considers competition as an impetus toward improving products and services and enhancing performance design.

The organization use market development when they want to target different customer segment in the market-by-market new market by existing products for example they could be exported or promote the current product into another region.

The organization use diversification when they want to adopt the developments so they use new product for new market, and it could be different region or same region, so it helps the organization to grow. Diversification can be classified into two following types:

- 1- Related diversification: the organization use this type by adding new product to increase the production. It happened when the organization use related products or market. The goal of this type of strategy is to strategic fit.
- 2- Unrelated diversification: this strategy related to new products or services that different technological from the current products. This type of diversification is to get high return on investment. Moreover, this type can have an opportunities and can achieve the market or production synergy.

The expansion of large and medium manufacturing businesses has become an interesting subject to be studied. Prayhoego (2013), has researched TQM application on small and medium manufacturing business. The results found that total quality management (TQM) application in small and medium enterprises can increase the competitive advantages of the company in Surabaya therefore, the employees can be ethical in the company. The incorporation of giving voice, contact, and sensitivity to self and others into the business will result in the whole organization becoming

ethically correct, which will promote the environment's stability and internal development (Jeanes, 2016).

In a Summary, growth is essential for the business company because of the continuous changes in client types and the raise of the product in the market. Now, in various periods, nature requires the company to be innovative and use high-tech technologies and techniques, despite that the company must take all of the positive aspects from every opportunity they have by measuring and analyzing the company's assets and their skills.

## **2.5 Previous Study**

### **2.5.1 International studies**

**Kuruppuarachchi and Perera (2010), “Impact of TQM and technology management on operation performance”** in Sri Lanka, aimed to examine the impact of (TQM) and management of technology on the outcome of the business of manufacturing organization. Data were analyzed by the structural equation modeling technique. The required sample data were from 44 Sri Lankan manufacturing organizations. The result showed a positive impact of (TQM) on operation outcome while technology management has no significant direct relationship with operational performance.

**MUTIA (2013), “the effect of internal growth strategy on financial performance”** in Zimbabwe targeted toward examining the effect of internal growth strategy on the financial performance of commercial banks. The data were collected through primary and secondary data which are qualitative and quantitative. Information was gathered from a sample of managers, operation managers, and marketing managers. The study showed that the bank's financial output was influenced by the range of services offered, the number of referrals received, and customer reviews.

**Addae-Korankye (2013), “Total quality management: a source of competitive advantages”**. A comparative study of manufacturing and service firms in Ghana, the study examined if (TQM) is an aggressive advantage in the manufacturing sector. This research utilizes questionnaires plus interviews to take the data. The sample was 4 maintenance businesses and 4 manufacturing businesses. The result showed that the impact of (TQM) is an aggressive advantage.

**Munizu (2013), “the impact of total quality management performs to aggressive advantages plus the outcome of the organization: case of fishery industry in Province”** in South Sulawesi this study examined the impact of (TQM) practices on aggressive advantages and the outcome of the business. The data collected used a questionnaire. The sample of this study was 66 managers of fishery companies. The result showed a positive impact of TQM on performance plus aggressive advantages.

**Gupta & Belokar (2014), “Application of total quality management in Indian Airline industry”** in India, purpose to examine the advantage of (TQM) application in airline business through determining the (TQM) at airlines. They utilized a survey of a questionnaire. The sample consists of 116 workers from various departments. The end outcome showed a positive impact of TQM on organization innovation and maintain sustainable competitiveness.

**Gemina (2015), “Implementation of total quality management related to company managerial and competitive advantages”** in Bogor, Sukabumi, the objective of the study is to examine the impact of (TQM) on competitive advantages. Population was CEOs from SME plus cooperative in Bogor, Sukabumi. This study used a questionnaire. The data samples were collected from 100 respondents. The result showed that (TQM) has a positive impact on competitive advantages.

**Fening (2016), “Linkage between total quality management and organizational survival in manufacturing company in Ghana”** the purpose of the study is to examine the correlation of (TQM) with the survival of the organization in business companies. The data

information was taken from questionnaires. The samples were 250 managers of business firms. The result showed a high positive impact between (TQM) and organizational performance.

**Modilim (2016), “strategies for growing and sustaining successful full business”** the study aimed to find the strategies utilized by the few firms’ managers in Lagos, Nigeria to maintain their business. The data collected through semi-structured, individual interviews with the assessment through records of the firm, handbills, and contract documents. The sample involves three small business leaders. The result showed a positive impact of growth strategies on small businesses.

**Zakuan (2016), “An analysis of the impact of total quality management on employee performance with mediating role of process innovation”**, the study aimed to examine the link of (TQM) practices, process innovation with the outcome of the workers in Malaysia. Zakuan used a qualitative approach. The data used a questionnaire. The sample of the study was 102 workers in a car Manufacturing Company. The result of the study showed the importance of the relationship between TQM practice, process innovation, and the outcome of the worker.

**Nyamari (2017), “effect of total quality management practice on operational performance of commercial banks”** in Kenya, the study aimed to examine the effect of (TQM) on the operational outcome. Data collected by a semi-structured questionnaire. In this study, there was no sample due to the census survey. The result showed that the (TQM) affects operation outcomes.

**Siregar (2017), “effect of total quality management on the quality and productivity of human resources”** in North Sumatra, the study aimed to examine the effect of (TQM) on the

value and output of (HR). Data used analysis of instructors of private combined with public colleges in north Sumatra to get factor may influence the value and output of HR. The sample involves teachers and coaches. The result showed a strong and positive correlation also, factors of (TQM) has a direct positive impact on the value of HR expect support structure.

**Torsen (2018), “The effect of total quality management on organization growth of Adama beverage: A marketing mix prospective”.** In Bahrain, The purpose of the study was to investigate the effect of (TQM) on organizational growth. The data were collected through a questionnaire and performed by (SPSS). The sample of data was 120 individuals. The result showed a positive with importance impact of (TQM) on organizational expansion.

**Honarpour, Jusoh & Nor (2018), “Total quality management, knowledge management, and innovation”**, the study aimed to investigate the correlation between (TQM) with the management of knowledge combined with the impact of the procedure and creative products in Malaysia. Data collected used valid and reliable tests of the measurements model. The sample of this study was 190 researcher and development unit managers. The result discovered that (TQM) with management knowledge has a positive association with process and product innovation.

**Pambreni (2019), “The influence of TQM towered organization performance”**, the purpose of the study was figuring out the impact of TQM on the outcome of the business of small and medium businesses assistance area in Selangor, Malaysia. Data collected using a questionnaire. The samples were 350 managers of service sectors. The result showed a positive impact of TQM on the outcome of the organization.

Mohammed (2019), **“the impact of TQM on operational performance Ethiopian pharmaceutical manufacturing plants”** in Ethiopia, the study was to investigate the impact of TQM on the operation performance. Information was taken by self-questionnaire. Examine the link of TQM variables, on the one hand, using correlation with multiple regression and the outcome of operation on the other hand. The analysis of correlation has been a great positive correlation of TQM combined with operational performance. The sample of this study was 13 companies out of 65 questionnaires responded. The results of the regression analysis revealed that the client's focus, process management, product design, and individual management have a significant impact on the outcome of functioning.

**Jimoh (2019), “total quality management practice plus organization performance: the mediating roles of strategies for continuous improvement”** the study aimed for investigating the correlation impact of TQM practice, with tactics of improvement continuously on various outcome assess between structure business in Nigerian construction. This study used a sample of 128 questionnaires from a well-structured questionnaire by self-directed to 155 companies. They used structured interviews created by the base of cross-sectioned examination. This study used a mixed method and the results showed that (TQM) practices have a positive significant impact on the outcome of the business.

### 2.5.2 Arab studies

**Rad (2005), “A survey of total quality management in Iran Barriers to successful implementation in health care organizations”** the study aimed to o investigate the success of TQM and barriers to its successful implementation in health care services organizations. This study used descriptive and cross-sectional by questionnaire. The population were 90 manegers of health care service organization. The result of correlation analyses between the success of TQM and its principles, success, process management and focus on employees had a positive effect and focus on material resources and on suppliers had a lower effect.

**Hussain, Khattak, Rizwan, & Latif (2013), “the impact of growth strategy suggests by Ansoff on firms’ growth and moderating effect of market environment in the food sector in Pakistan”** the study aimed to examine the impact of growth strategy on business expansion with moderating impact of the environmental market. Data methodology used a questionnaire of 65 questions distributed to the managers of the fast-food sector. Data were taken from managerial work. The findings revealed that Ansoff's growth strategy contributes to the firm's growth and diversification and that the moderate variable does not moderate the relationship between the strategy of the growth and strategy of Ansoff despite market penetration.

**Mosadeghrad (2013), “Obstacles to TQM success in health care systems”** the study aimed to examine the barriers to TQM successful implementation in the healthcare sector. Data were searched of 15 electronic databases from literature review. The result showed unsuccessful TQM efforts in healthcare organizations can be attributed to the strongly departmentalized,

bureaucratic and hierarchical structure, professional autonomy, tensions between managers and professionals and the difficulties involved in evaluating healthcare processes and outcomes.

**Sadikoglu, & Olcay (2014), “The effect of total quality management practice on performance and the reason of and the barriers to TQM practice in Turkey”** the study aimed to study the impact of TQM practices on the outcome measures and reasons that block the (TQM) practice on firms. This study used a cross-sectional study. The sample obtained 242 questionnaires from member firms to the Turkish quality association. This study discovered that the value of (TQM) practices varies depending on the various outcome.

**Mustafa (2015), “impact of total quality management practice on innovation in service organization”** the study aimed to examine the impact of (TQM) practice and identify which practice has more influence on innovation. Data collected using a survey method from a service organization in Malaysia. The sample is people management. The result showed the positive impact of (TQM) on innovation, so the research improved the perspective of service organization for the arguments on the correlation of (TQM) with innovation.

**Abuzaid (2015),” Examination the impact of total quality management practice in achieving strategy agility: applied study on the Jordanian private hospitals”** the purpose for this research was to investigate the impact of (TQM) practice on the agility of the strategy. The information utilized questionnaire and the sample were taken by the executives. The results showed that (TQM) practice has a positive impact on strategic agility.

**El-Tohamy, & Al Raoush (2015), “The impact of applying total quality management principle on overall hospital effectiveness: An empirical study on the HCAC accredited**

**governmental hospital in Jordan”** the purpose of the study was to examine the impact of (TQM) principle on hospital effectiveness in the accredited governmental hospital. This study used a structured questionnaire. The sample of this study included 1290 employees. The result showed positive importance of the impact of the (TQM) principle on the effectiveness of the whole hospital.

**Al-Damen (2017), “The impact of total quality management on organization performance case of Jordan oil Petroleum Company”**, the study examined the impact of (TQM) on the outcome of the organization. The method used primary and secondary data. The information was taken from 103 managers of various departments. The result indicated a positive impact of TQM on the outcome of the organization.

**Aletaiby (2018), “A framework to facilitate total quality management implementation in the upstream oil industry: An Iraqi case study”** the study aimed to develop a framework towards making the implementation of TQM in the Iraqi upstream oil area possible. The method in this study was descriptive and inferential statistical analysis and content analysis method. The sample was collected from the most important oil company in Iraq. The result showed that enhancement of the framework can facilitate applying (TQM) practices within the Iraqi upstream oil company which is coming back with a positive impact on their total performance.

**Alaoun (2018), “Evaluation of total quality management influence on operation in Iran automobile industry”** In Iran, the purpose of the study was to adjust (TQM) usage on working in the automobile industry. The sample was taken from 384 leadership of Iran Khodro

and Saipa companies. Data collected by questionnaire. The results have been obvious about the positive relation of (TQM) and the performance of the operation.

**Ahmed (2020), “The impact of total quality management on Non-financial organization performance”** in Pakistan, the study aimed to examine the impact of (TQM) (executive, clients want and needs, employee involvements, learning and coaching, continuous process improvement, plan for strategy) on Non-financial organization measurement (work fulfillment, the business loyalty, plus the innovation of the workers). The method used in this study was multiple regression. Data were collected from 121 employees from different hotels. The result showed a positive impact of (TQM) on Non-financial organizations.

**Arqawi (2020), “The Impact of Total Quality Management and Perceived Service Quality on Patient Satisfaction and Behavior Intention in Palestinian Healthcare Organizations”** in palastine, the study aimed to examine the linkage between TQM, PSQ, as well as the impact on the patient satisfaction, and behavior intentions between the palastinian healthcare. The method of this study was by questionnaire to collect the data. The data collected from 320 individuals.the results showed that TQM has significantly affects PSQ and PS; PSQ positively influence PS and BIs and BIs are influenced positively by PS.

## **2.6 Contribution of the study to knowledge**

This study wants to reach some differentiation from previous studies. To clarify the differentiation, which are presented as the follow:

1. Most researchers and studies were the impact of TQM on organization performance while this study investigate the impact of TQM on internal growth strategy in Jordanian private medical diagnostic labs in Amman-Jordan.
2. This research is an addition to the studies that focused on healthcare sector in Jordan, as many studies concerned with industrial sector.
3. TQM concept: This study may increase awareness about the role of TQM in achieving internal growth strategy.
4. Many of previous studies concerning TQM concept were conducted in different countries around the world, while in Arab countries – up to researcher knowledge there are a limited few study; this research as it was carried in Amman- Jordan.

## **3. Chapter Three: Methodology**

### **3.1 Introduction**

This chapter is divided into seven sections which include study design, population and sampling, data sources, the procedure of data collection, data analysis and interpretation, validity, and liability in addition to the limitation of the study.

### **3.2 Research design**

This study is a descriptive study to describe the variables and determining the cause-effect to measure the impact of total quality management (TQM) and its dimensions on the internal growth strategy in private medical diagnostic Labs. The study targeted private medical diagnostic labs which include Bio-labs & Med-labs located in Amman-Jordan and the study starts by reviewing the previous study to develop the suggested model. Data were collected from the managers and the employees who work at the labs based on the survey strategy, accordingly, a questionnaire was used. In order to conduct the required statistical tests, the survey strategy must be directly relevant to the implemented method, and this strategy must be matched to the context of the proposed questions and objectives (Saunders, et al., 2012). After looking over the suitability and completeness of the collected questionnaires, the data were coded by SPSS 20. After confirming the data, the research relies on valid and reliable instruments, the method is done through multiple regression was used to test the impact of (TQM) on internal growth strategy.

### 3.3 Population, sample, and unit of analysis

According to this research, the study population was private medical diagnostic labs in Amman, Jordan which targets Bio-labs and Med-labs in Amman, Jordan. While the unit of analysis is consisting of about 270 managers and all level of other employee from Bio-labs & Med-labs.

Demographic details of the sample units:

The Personal and Occupational characteristics data of the sample units (gender, age, years of experience and education level), collected using the developed questionnaire, are explained in table (3.1) as follow:

**Table 3.1: Demographic Analysis**

		Frequency	Percent
Gender	Female	117	56.80%
	Male	89	43.20%
	Total	206	100.00%
Age	less than 30 years	130	63.11%
	Less than 40 years	59	28.64%
	Less than 50 years	15	7.28%
	51 Years or above	2	0.97%
	Total	206	100.00%
Years of experience	Less than 5 years	123	59.71%
	5 -10 years	64	31.07%
	11-15 Years	5	2.43%
	16 years or above	14	6.80%
	Total	206	100.00%
Educational level	Bachelor	162	78.64%
	Master	36	17.48%
	PhD	8	3.88%
	Total	206	100.00%

The results in table (3.1) show the gender distribution for the sample of the study. Female were more respondents with 117 with a percentage of (56.80%) while the male is 89 with a percentage of (43.20%) which means that Bio-labs & Med-labs employees in Amman are female, this could be justified by the Arabic and Islamic culture of Jordan. In addition, 130 individual respondents with a percentage of (63.11%) are less than 30 years old, while only two respondents with a percentage of (0.97%) are 51 years old or above. Furthermore, most of the respondent is less than five years of experience with 123 individuals and a percentage of (59.71%), then from 5 to 10 years of experience with 64(31.07%), 16 or above years of experience with 14 (6.80%), and 11 to 15 years of experience with 5 (2.43%). Finally, it seems that the most respondents hold bachelor's degree with a percentage of (78.64%) and 162 respondents, while the PHD is the least academic qualification degree with only 8 respondents and percentage of (3.88%)

### **3.4 Data sources**

Data were collected from two sources, as follow:

- Secondary data were gathered from several sources like books, articles, thesis, journals, studies, research and annual reports, which supported the topics of this research.
- Primary data were gathered using a questionnaire distributed to Bio-labs & Med-labs to collect data and information beside several telephone calls from employees and few meetings with managers.

### 3.5 Procedure for data collection

The researcher starts visiting Bio-labs & Med-labs to explain the purpose of the study and take all the comments from the managers. Data were collected by using questionnaires through professional and highly experience managers and the employees of all levels at private medical diagnostic labs which are two lab Bio-labs & Med-labs in Amman-Jordan.

Because of Covid-19, the study had some difficulties getting data from employees inside the labs; internal visits were not permitted, except for patients, so the data was collected from managers only face to face while other employees through WHATSAPP (website).

### 3.6 Data analysis and interpretation

To report the research questions and test the research hypotheses, the descriptive statistical method was employed, where the descriptive statistics were addressed using SPSS software. For this research, the following analytical methods were employed:

**Descriptive statistics:** to show the characteristics of the respondents and describe their answers. The researcher relied on the following descriptive statistical tests:

**Frequencies and percentages:** it was used to measure the relative frequency distributions of the characteristics of the respondents and their responses to the questionnaire items.

**Multiple Regression:** to test the impact of the independent variables on the dependent variable.

**Mean (average):** is the most common measure of central tendency and refers to the average value of a group of numbers.

**Standard deviation:** it was used as a dispersion measurement to measure the deviation in the responses from its mean.

### 3.7 Validity and Reliability

**Validity Test:** Two methods were used to confirm validity: content and face validity. Content validity was confirmed through using multiple sources to collect the data such as books, journals, articles, theses, dissertations, research, and the worldwide web. The face validity was confirmed through expert interviews and a panel of judges.

**Reliability Test:** (Cronbach's Alpha): Cronbach's alpha coefficients of internal consistency were used to test the consistency and suitability of the measuring tools. The reliable tools have a Cronbach's alpha above 0.75 and are accepted if it is exceeding 0.60 (Hair, et. al. 2014).

*Table 3.2: Descriptive Statistics Analysis*

Variable	No. of Items	Cronbach Alpha Values
<b>Total quality management</b>	<b>20</b>	<b>.929</b>
Leadership	5	.793
Process	5	.854
Continuous	5	.761
Customer focus	5	.819
<b>Internal Growth Strategy</b>	<b>5</b>	<b>.786</b>

### **3.8 Introduction**

This chapter will cover the findings of a data descriptive analysis of respondents' perceptions through means, standard deviations, level of significant, t-value, importance, and ranking. Then, the chapter will present a correlation study in order to test the relationship between total quality management (TQM) dimensions (leadership, process management, continuous improvement, customer focus) among each other and the relationship between (TQM) dimensions (leadership, process management, continuous improvement, customer focus) and internal growth strategy. Finally comes the hypothesis testing to test the impact of (TQM) on internal growth strategy in private medical diagnostic labs in Amman-Jordan.

## 4. Chapter Four: Data Analysis and Hypotheses Testing

### 4.1 Descriptive Analysis

This section will describe both independent and dependent variables from a statistical point of view through means, standard deviations, level of significant, t-value, importance, and ranking.

In order to calculate the importance, the following equation will be used:

$$\text{Interval: } (5-1)/3 = 1.33$$

$$\text{Low implementation} = 1 \text{ to } 2.33$$

$$\text{Medium implementation} = 2.34 \text{ to } 3.66$$

$$\text{High implementation} = 3.67 \text{ to } 5$$

#### 4.1.1 *Independent variable: Total quality management (TQM)*

What is the currently achieved level of total quality management (TQM) of private medical diagnostic labs in Amman? To answer such a question, means, standard deviations, level of significant, t-value, importance, and ranking were obtained for each (TQM) dimension (leadership, process management, continuous improvement, customer focus).

**Table 4.1: Mean, Standard Deviation, t-values, significant level, Ranking and Importance of Leadership.**

<b>Items</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Std. Error</b>	<b>T</b>	<b>Sig.</b>	<b>Statement Importance</b>	<b>Importance Degree</b>
The leadership provide training to all employee	3.903	1.0685	.0744	12.128	.000	5	High
The leadership communicates quality goals to employees	4.063	.6408	.0446	23.811	.000	2	High
The leadership take quality as their responsibility	4.087	.6417	.0447	24.319	.000	1	High
The leadership provides evaluations based on quality performance	4.005	.7619	.0531	18.930	.000	3	High
The leadership seeks challenges and changes	3.976	.7805	.0544	17.943	.000	4	High
<b>Leadership</b>	<b>4.007</b>	<b>.5557</b>	<b>.0387</b>	<b>26.002</b>	<b>.000</b>	<b>-</b>	<b>High</b>

Table (4.1) shows that the mean of leadership items ranges from 3.903 to 4.087 while the standard deviation values ranges from 0.6408 to 1.0685. This demonstrates that the employees in private medical diagnostic labs are agreed on a high level of implementation of leadership items.

For instance, the results showed that question number three which states “The medical labs take quality as their responsibility” was ranked first with the highest mean value (4.087) and standard deviation value (0.6417) which indicates that there is a high degree of agreement about the effect of taking quality as personal responsibility by medical labs on leadership. Besides, statement number one which states” The medical labs provide training to all employee” was ranked last with a (3.903) mean value and a (1.0685) standard deviation, which again indicates that there is a high degree of agreement on the effect of providing training to all employees on leadership.

In general, the average of the five items of leadership is 4.007 while the average standard deviation is 0.5557 which illustrates that the employees in private medical diagnostic labs are agreed on a high level of implementation of leadership variables. Furthermore, the average of the calculated t-value is (26.002) and the significant level is less than 5% (0.000) which indicates that all the items of leadership are highly important for employees working in the private medical diagnostic labs and that there is an agreement among the employees about that importance and effect of leadership implementation.

**Table 4.2: Mean, Standard Deviation, t-values, significant level, Ranking and Importance of Process Management.**

Items	Mean	Std. Dev.	Std. Error	T	Sig.	Statement Importance	Importance Degree
The medical lab receives the samples at the right time	4.150	.7134	.0497	23.146	.000	2	High
The medical lab responds quickly to patients	4.097	.5135	.0358	30.663	.000	4	High
The medical lab documents all the results and the events	4.277	.5641	.0393	32.485	.000	1	High
The medical lab uses standardized activity	4.146	.6901	.0481	23.827	.000	3	High
The medical lab applies periodical audits	3.995	.6735	.0469	21.206	.000	5	High
<b>Process Management</b>	<b>4.133</b>	<b>.5052</b>	<b>.0352</b>	<b>32.191</b>	<b>.000</b>	<b>-</b>	<b>High</b>

Table (4.2) shows that the mean of process management ranges from 3.995 to 4.277 while the standard deviation values range from 0.5135 to 0.7134. This demonstrates that the employees in private medical diagnostic labs are agreed on a high level of implementation of process management items.

Statement number three for example which states “The medical lab documents all the results and the events” was ranked first with the highest mean value (4.277) and (0.5641) standard deviation, which indicates that there is a high degree of agreement about the effect of documenting all the results and the events by medical labs on process management.

In general, the average of the five items of process management is 4.133 while the average standard deviation is 0.5052 which again illustrates that the employees in private medical diagnostic labs are agreed on a high level of implementation of process management variables. Furthermore, the average of the calculated t-value is (32.191) which is higher than the critical t-

value (1.96) and the significant level is (0.000) which is less than 5%. This indicates that all the items of process management are highly important for employees working in the private medical diagnostic labs and that there is an agreement among the employees about the importance and effect of process management implementation.

**Table 4.3: Mean, Standard Deviation, t-values, significant level, Ranking and Importance of Continuous Improvement.**

<b>Items</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Std. Error</b>	<b>T</b>	<b>Sig.</b>	<b>Statement Importance</b>	<b>Importance Degree</b>
The medical lab uses updated programs to reduce time	4.053	.6641	.0463	22.766	.000	2	High
The medical lab establishes processes to make the improvements	3.879	.8322	.0580	15.154	.000	5	High
The medical lab depends on quality tools to improve growth	3.927	.8665	.0604	15.358	.000	4	High
The medical lab uses preventive solution for expected problems	4.058	.8243	.0574	18.426	.000	1	High
The medical lab uses core competencies to provide a unique service	4.000	.7191	.0501	19.960	.000	3	High
<b>Continuous Improvement</b>	<b>3.983</b>	<b>.5611</b>	<b>.0391</b>	<b>25.157</b>	<b>.000</b>	<b>-</b>	<b>High</b>

Table (4.3) shows that the mean of continuous improvement ranges from 3.879 to 4.058 while the standard deviation values range from 0.6641 to 0.8665. This demonstrates that the employees in private medical diagnostic labs are agreed on a high level of implementation of continuous improvement items.

The first ranked statement was statement number four which states “The medical lab uses the preventive solution for expected problems” gained the highest mean value (4.058) and (0.8243) standard deviation, which indicates that there is a high degree of agreement about the effect of using the preventive solution for expected problems by medical labs on continuous improvement.

In general, the average of the five items of continuous improvement is 3.983 while the average standard deviation is 0.5611 which again illustrates that the employees in private medical diagnostic labs are agreed on a high level of implementation of continuous improvement variables. Furthermore, the average of the calculated t-value is (25.157) which is higher than the critical t-value (1.96) and the significant level is (0.000) which is less than 5%. This indicates that all the items of continuous improvement are highly important for employees working in the private medical diagnostic labs and that there is an agreement among the employees about the importance and effect of continuous improvement implementation.

**Table 4.4: Mean, Standard Deviation, t-values, significant level, Ranking and Importance of Customer Focus.**

<b>Items</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Std. Error</b>	<b>t</b>	<b>Sig.</b>	<b>Statement Importance</b>	<b>Importance Degree</b>
The medical lab checks the feedback from the customers continuously	4.097	.7393	.0515	21.298	.000	3	High
The medical lab maintains fast responses to the customers	4.087	.7915	.0551	19.718	.000	4	High
The medical lab takes the test at the right time	4.107	.6464	.0450	24.576	.000	2	High
The medical lab documents customer complaints	3.956	.7279	.0507	18.857	.000	5	High
The medical lab aims to have fully satisfied, highly moral customers.	4.121	.6551	.0456	24.570	.000	1	High
<b>Customer Focus</b>	<b>4.074</b>	<b>.5439</b>	<b>.0379</b>	<b>28.337</b>	<b>.000</b>	<b>-</b>	<b>High</b>

Table (4.4) shows that the mean of customer focus ranges from 3.956 to 4.121 while the standard deviation values ranges from 0.6464 to 0.7915. This demonstrates that the employees in private medical diagnostic labs are agreed on a high level of implementation of customer focus items.

The average of the five items of customer focus is 4.074 while the average standard deviation is 0.5439 which again illustrates that the employees in private medical diagnostic labs are agreed on a high level of implementation of customer focus variables. Furthermore, the average of the calculated t-value is (28.337) which is higher than the critical t-value (1.96) and the significant level is (0.000) which is less than 5%. This indicates that all the items of customer focus are highly important for employees working in the private medical diagnostic labs and that there is an agreement among the employees about the importance and effect of customer focus implementation.

#### 4.1.2 Dependent variable: Internal Growth Strategy

What is the currently achieved level of the internal growth strategy of private medical diagnostic labs in Amman? To answer such a question, means, standard deviations, level of significant, t-value, importance, and ranking were obtained for each internal growth strategy dimension (Market penetration and product development).

**Table 4.5: Mean, Standard Deviation, t-values, significant level, Ranking and Importance of Internal Growth Strategy.**

Items	Mean	Std. Dev.	Std. Error	t	Sig.	Statement Importance	Importance Degree
The medical lab has increased its sales compared with the last five years	3.869	1.0534	.0734	11.840	.000	5	High
The medical lab has increased its net profits compared with the last five years	3.990	.6400	.0446	22.207	.000	4	High
The medical lab has increased the number of staff compared with the last five years	4.194	.6098	.0425	28.107	.000	1	High
The medical lab has increased the branches compared with previous years	4.136	.7265	.0506	22.442	.000	2	High
The medical lab has increased the employees' satisfaction in strategy development	4.092	.6295	.0439	24.901	.000	3	High
<b>Internal Growth Strategy</b>	<b>4.056</b>	<b>.4526</b>	<b>.0315</b>	<b>33.500</b>	<b>.000</b>	<b>-</b>	<b>High</b>

Table (4.5) shows that the mean of internal growth strategy items ranges from 3.869 to 4.194 while the standard deviation values ranges from 0.6098 to 1.0534. This demonstrates that

the employees in private medical diagnostic labs are agreed on a high level of implementation of internal growth strategy items.

For instance, the results showed that question number three which states “The medical lab has increased the number of staff compared with the last five years” was ranked first with the highest mean value (4.194) and standard deviation value (0.6098) which indicates that there is a high degree of agreement about the effect of increasing the number of staff compared with the last five years by medical labs on internal growth strategy. Besides, statement number one which states” The medical lab has increased its sales compared with the last five years” was ranked last with a (3.869) mean value and a (1.0534) standard deviation, which again indicates that there is a high degree of agreement on the effect of increasing the sales compared with the last five years on internal growth strategy.

The average of the five items of internal growth strategy is 4.056 while the average standard deviation is 0.4526 which again illustrates that the employees in private medical diagnostic labs are agreed on a high level of implementation of internal growth strategy variables. Furthermore, the average of the calculated t-value is (33.500) which is higher than the critical t-value (1.96) and the significant level is (0.000) which is less than 5%. This indicates that all the items of internal growth strategy are highly important for employees working in the private medical diagnostic labs and that there is an agreement among the employees about the importance and effect of internal growth strategy implementation.

## 4.2 Relationships between Variables

**Table 4.6: Pearson Correlation Matrix between Total quality management (TQM) dimensions (leadership, process management, continuous improvement, and customer focus) and internal growth strategy.**

		<b>Correlations</b>				
		Leadership	Process	Continuous	Customer focus	Internal Growth Strategy
Leadership	Pearson Correlation	1	.804**	.797**	.631**	.792**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	206	206	206	206	206
Process	Pearson Correlation	.804**	1	.795**	.554**	.742**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	206	206	206	206	206
Continuous	Pearson Correlation	.797**	.795**	1	.674**	.814**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	206	206	206	206	206
Customer focus	Pearson Correlation	.631**	.554**	.674**	1	.778**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	206	206	206	206	206
Internal Growth Strategy	Pearson Correlation	.792**	.742**	.814**	.778**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	206	206	206	206	206

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table (4.6) presents the findings of a correlation analysis which seeks to examine the relationship between (TQM) dimensions (leadership, process management, continuous improvement, customer focus) among each other and the relationship between (TQM) dimensions (leadership, process management, continuous improvement, customer focus) and internal growth strategy. From the results of the correlation, strong relationship between internal growth strategy

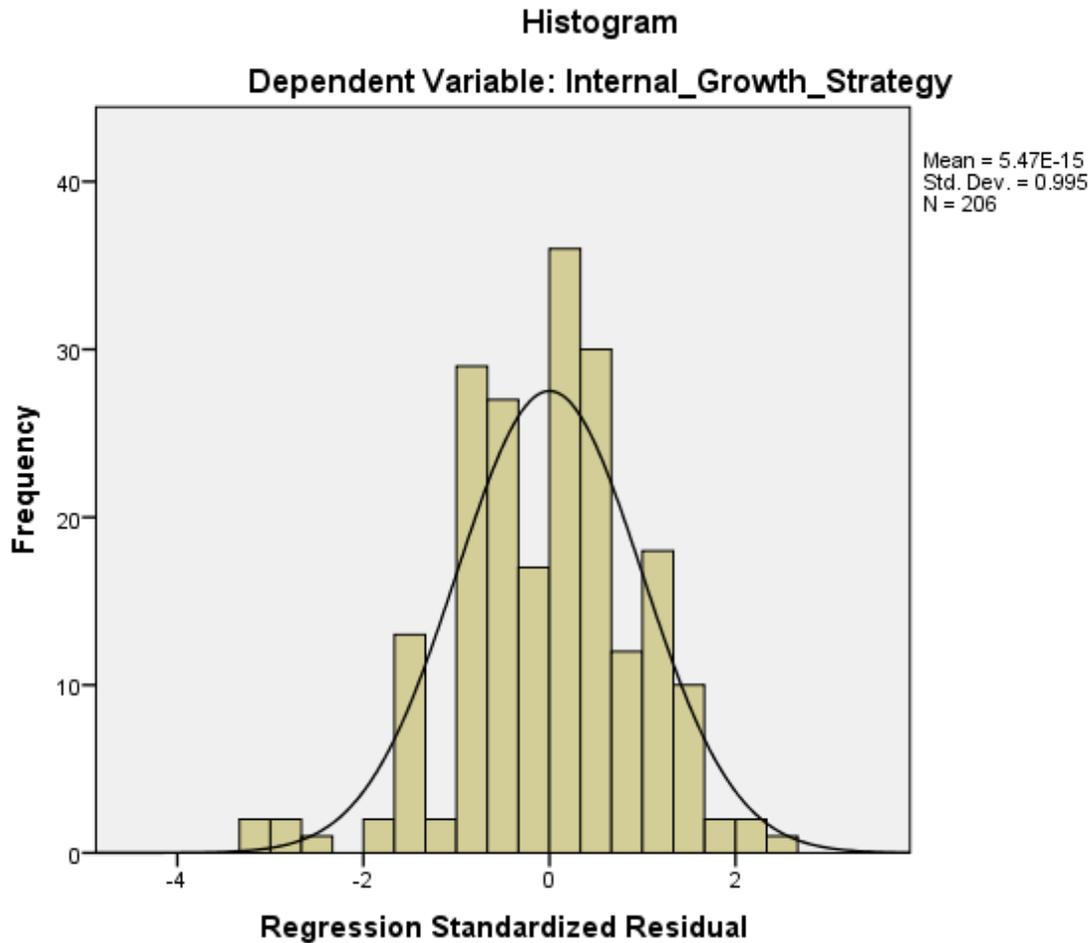
and (TQM) dimensions can be observed depending on the Pearson correlation coefficient values which started by 0.742 (process management) and ended by 0.814 (continuous improvement). Moreover, strong relationships among (TQM) dimensions themselves can be observed depending on the Pearson correlation coefficients values which started by 0.631 (leadership with customer focus) and ended by 0.804 (leadership with process management).

#### **4.3 Adequacy of the data analysis to test the study hypotheses:**

This study aims to analyze the impact of total quality management (TQM) (leadership, process management, continuous improvement, customer focus) on internal growth strategy in private medical diagnostic labs in Amman-Jordan using both simple and multiple regressions analysis. However, certain assumptions, such as normality, linearity, and multicollinearity, should be tested before using regression analysis (Sekaran and Bougie 2013).

### 4.3.1 Normal Distribution Histogram:

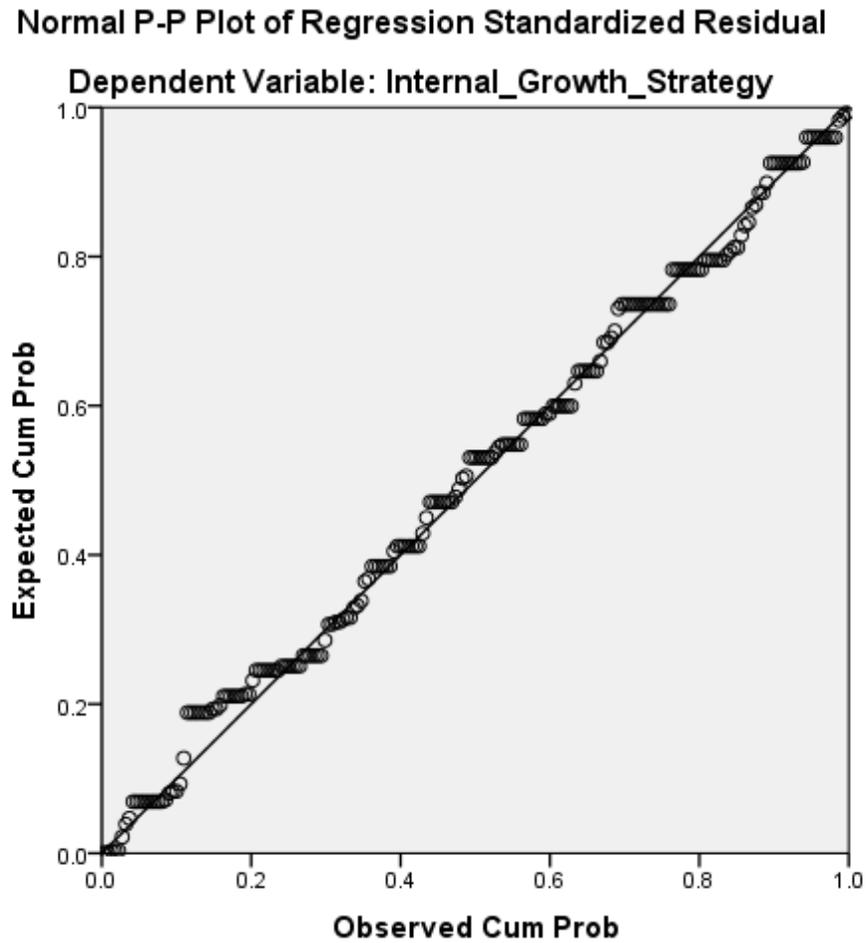
Since the residuals do not affect the normal distribution, the outcome of the histogram in figure (4.1) indicates that the data are normally distributed, which confirms normality (Sekaran, 2016).



*Figure 4.1: Normal Distribution Histogram*

### 4.3.2 Linearity Test

The result in figure (4.2) shows that the relationship between the study variables is linear (Sekaran, 2016).



*Figure 4.2: linearity test*

### 4.3.3 Multicollinearity

This study used both the Variable inflation factor (VIF) and the tolerance test for each dimension of total quality management (TQM) represented by (leadership, process management, continuous improvement, customer focus) as well as the internal growth strategy variable to test the assumption of multicollinearity.

According to Sekaran and Bougie (2016), the Variable inflation factor (VIF) must not exceed 5 as it is related to tolerance degree, the tolerance test value, on the other hand, must be greater than 0.1.

**Table 4.7: Multi-Collinearity test.**

	Collinearity Statistics	
	Tolerance	VIF
Leadership	.273	3.664
Process management	.287	3.482
Continuous improvement	.259	3.859
Customer focus	.519	1.926

The results of the multicollinearity test are shown in Table (4.7), with the findings indicating that the VIF for each variable is less than 5. Furthermore, the tolerance results are greater than 0.1. This means that there is no multicollinearity in the current study's dependent and independent variables.

#### 4.4 Results Pertaining to the Main Hypothesis and Sub-Hypotheses

##### 4.4.1 Results pertaining to the main hypothesis H01

This part of the study aims to test the main study hypothesis states as follow:

H01: There is no statistically significant impact of total quality management (TQM) represented by (leadership, process management, continuous improvement, customer focus) on internal growth strategy in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ).

**Table 4.8: Results of Multiple Regressions Analysis to test the main hypothesis H01**

<b>Model Summary</b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.892 <sup>a</sup>	.795	.791	.2069	

<b>ANOVA<sup>a</sup></b>						
Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	33.384	4	8.346	195.007	.000 <sup>b</sup>
	Residual	8.603	201	.043		
	Total	41.987	205			

<b>Coefficients<sup>a</sup></b>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	.667	.130	5.122	.000
	Leadership	.192	.050	.236	3.857

Process management	.116	.053	.129	2.172	.031
Continuous improvement	.218	.051	.271	4.315	.000
Customer focus	.312	.037	.375	8.471	.000

a. Dependent Variable: Internal Growth Strategy

b. Predictors: (Constant), Customer focus, Process, Leadership, Continuous

Table (4.8) Shows the results of the multiple regressions analysis to test the main hypothesis (H01) which aims to analyze the impact of (TQM) represented by (leadership, process management, continuous improvement, customer focus) on internal growth strategy in private medical diagnostic labs in Amman at a significant level ( $\alpha \leq 0.05$ ). The fitness of the model for multiple regressions is illustrated by the value of R-squared. Since R-squared is 0.795 then the dimensions of the (TQM) can explain 0.795 of variance on the internal growth strategy of private medical diagnostic labs in Amman, since (R-squared =0.795, F-test=195.007, Sig.=0.000).

Accordingly, the null hypothesis is rejected and concludes the presence of a significant positive impact of (TQM) represented by (leadership, process management, continuous improvement, customer focus) on internal growth strategy in private medical diagnostic labs in Amman at a significant level ( $\alpha \leq 0.05$ ).

#### 4.4.2 Results pertaining to the sub hypothesis H01.1

This part of the study aims to test the first sub hypothesis states as follow:

H01.1: There is no statistically significant impact of leadership on internal growth strategy in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ).

**Table 4.9: Results of simple Regressions Analysis to sub-hypothesis H01.1**

<b>Model Summary</b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.792 <sup>a</sup>	.627	.626	.2769	

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.346	1	26.346	343.639	.000 <sup>b</sup>
	Residual	15.640	204	.077		
	Total	41.987	205			

<b>Coefficients<sup>a</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.472	.141		10.454	.000
	Leadership	.645	.035	.792	18.537	.000

a. Dependent Variable: Internal Growth Strategy

b. Predictors: (Constant), Leadership

The results of simple regression analysis to test the first sub-null hypothesis (H01.1) where the dependent variable is the internal growth strategy and the leadership is the independent variable, are shown in table (4.9). The results show that the value of R= (0.792), which indicates

that the correlation coefficient between internal growth strategy and leadership is 0.792, which is consistent with the results in the table (4.6) Besides, the value of R-squared ( $R^2$ ) is 62.7%, which indicates that leadership can explain 62.7% of the variance on internal growth strategy in private medical diagnostic labs in Amman.

The results in table (4.9) Also showed that the beta coefficient for the leadership variable is 0.645, with t calculated value (18.537) that higher than the critical t-value (1.96), and the significant level is less than 5% (0.000). This indicates that there is high importance of leadership and its impact on the internal growth strategy in private medical diagnostic labs in Amman. So that, the first sub-null hypothesis should be rejected and conclude the presence of a significant positive impact of leadership on internal growth strategy in private medical diagnostic labs in Amman- at a significant level ( $\alpha \leq 0.05$ ).

#### 4.4.3 Results pertaining to the sub hypothesis H01.2

This part of the study aims to test the second sub hypothesis states as follow:

H01.2: There is no statistically significant impact of process management on internal growth strategy in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ).

**Table 4.10: Results of simple Regressions Analysis to sub-hypothesis H01.2**

<b>Model Summary</b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.742 <sup>a</sup>	.551	.548	.3041	

<b>ANOVA<sup>a</sup></b>						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	23.118	1	23.118	249.947	.000 <sup>b</sup>
	Residual	18.869	204	.092		
	Total	41.987	205			

<b>Coefficients<sup>a</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.309	.175		7.476	.000
	Process management	.665	.042	.742	15.810	.000

a. Dependent Variable: Internal Growth Strategy

b. Predictors: (Constant), Process management

The results of simple regression analysis to test the second sub-null hypothesis (H0<sub>1.2</sub>) are shown in table (4.10). The dependent variable in the test was the internal growth strategy and the

process management was the independent variable. The results show that the value of ( $R=0.742$ ), which indicates that the correlation coefficient between internal growth strategy and process management is 0.742, which is consistent with the results in table (4.6) Besides, the value of R-squared ( $R^2$ ) is 55.1%, which indicates that process management can explain 55.1% of the variance on internal growth strategy in private medical diagnostic labs in Amman-Jordan.

The results in table (4.10), show that the beta coefficient for the process management variable is 0.665, with t calculated value (15.810) that higher than the critical t-value (1.96), and the significant level is less than 5% (0.000). This indicates that there is high importance of process management and its impact on the internal growth strategy in private medical diagnostic labs in Amman-Jordan. So that, the second sub-null hypothesis should be rejected and conclude the presence of a significant positive impact of process management on internal growth strategy in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ).

#### 4.4.4 Results pertaining to the sub hypothesis H0<sub>1.3</sub>

This part of the study aims to test the third sub hypothesis states as follow:

H0<sub>1.3</sub>: There is no statistically significant impact of continuous improvement on internal growth strategy in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ).

**Table 4.11: Results of simple Regressions Analysis to sub-hypothesis H0<sub>1.3</sub>**

<b>Model Summary</b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.814 <sup>a</sup>	.663	.661	.2633	

<b>ANOVA<sup>a</sup></b>						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	27.842	1	27.842	401.548	.000 <sup>b</sup>
	Residual	14.145	204	.069		
	Total	41.987	205			

<b>Coefficients<sup>a</sup></b>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	1.440	.132	10.922	.000
	Continuous improvement	.657	.033	.814	.000

a. Dependent Variable: Internal Growth Strategy

b. Predictors: (Constant), Continuous improvement

The results of simple regression analysis to test the third sub-null hypothesis (H0<sub>1.3</sub>) are shown in table (4.11), where the dependent variable is the internal growth strategy and the

independent variable is continuous improvement. The results show that the value of ( $R=0.814$ ), which indicates that the correlation coefficient between internal growth strategy and continuous improvement is 0.814, which is consistent with the results in table (4.6), besides, the value of R-squared ( $R^2$ ) is 66.3%, which indicates that continuous improvement can explain 66.3% of the variance on internal growth strategy in private medical diagnostic labs in Amman-Jordan

The results in table (4.11), show that the beta coefficient for the continuous improvement variable is 0.657, with t calculated value (20.039) that higher than the critical t-value (1.96), and the significant level is less than 5% (0.000). This indicates that there is high importance of continuous improvement and its impact on the internal growth in private medical diagnostic labs in Amman-Jordan. So that, the third sub-null hypothesis should be rejected and conclude the presence of a significant positive impact of continuous improvement on internal growth in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ).

#### 4.4.5 Results pertaining to the sub hypothesis H0<sub>1.4</sub>

This part of the study aims to test the fourth sub hypothesis states as follow:

H0<sub>1.4</sub>: There is no statistically significant impact of customer focus on internal growth strategy in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ).

**Table 4.12: Results of simple Regressions Analysis to sub-hypothesis H0<sub>1.4</sub>**

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.778 <sup>a</sup>	.606	.604	.2849		
ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.424	1	25.424	313.139	.000 <sup>b</sup>
	Residual	16.563	204	.081		
	Total	41.987	205			
Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.418	.150		9.433	.000
	Customer focus	.648	.037	.778	17.696	.000

a. Dependent Variable: Internal Growth Strategy

b. Predictors: (Constant), Customer focus

The results of simple regression analysis to test the fourth sub-null hypothesis (H0<sub>1.4</sub>) where the dependent variable is the internal growth strategy and the independent variable is customer focus, are shown in table (4.12), the results show that the value of R= (0.778), which indicates that

the correlation coefficient between internal growth strategy and customer focus is 0.778, which is consistent with the results in table (4.6), besides, the value of R-squared ( $R^2$ ) is 60.6%, which indicates that customer focus can explain 60.6% of the variance on internal growth strategy in private medical diagnostic labs in Amman-Jordan.

The results in table (4.12), also show that the beta coefficient for the customer focus variable is 0.648, with t calculated value (17.696) that higher than the critical t-value (1.96), and the significant level is less than 5% (0.000). This indicates that there is high importance of customer focus and its impact on internal growth strategy in private medical diagnostic labs in Amman-Jordan. So that, the fourth sub-null hypothesis should be rejected and conclude the presence of a significant positive impact of customer focus on Internal Growth Strategy in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ).

## **5. Chapter Five: Discussion, Conclusion and Recommendation**

### **5.1 Introduction**

This chapter below sections will include result discussion, conclusion, and recommendations.

### **5.2 Result Discussion**

This research has identified the impact of total quality management (TQM) on the internal growth strategy in Jordanian private medical diagnostic labs. This study indicates that the managers working at private medical diagnostic labs are aware of the importance of the implantation of the (TQM) variables.

Results of this study show that there is an agreement on high implementation of (TQM) variables of private medical diagnostic labs in Jordan and there is an agreement on high implementation of each (TQM) sub-variables. Results also showed that process management has the highest importance rate followed by customer focus then leadership and continuous improvement, respectively. By this finding it can be stated the objective of this study as follows:

1. The importance level of TQM on private medical diagnostic labs in Amman-Jordan.
2. The importance level of leadership on private medical diagnostic labs in Amman-Jordan based on respondents within the sample from analysis point of view was high (4.007).
3. The importance level of process management on private medical diagnostic labs in Amman-Jordan based on respondents within the sample from analysis point of view was high (4.133).

4. The importance level of continuous improvement on private medical diagnostic labs in Amman-Jordan based on respondents within the sample from analysis point of view was high (3.983).
5. The importance level of customer focus on private medical diagnostic labs in Amman-Jordan based on respondents within the sample from analysis point of view was high (4.074).
6. The improvement level of internal growth strategy on private medical diagnostic labs in Amman-Jordan based on respondents within the sample from analysis point of view was high (4.056)

This result supported by following studies that mentioned the importance of (TQM) and its sub-variables. Alzalabani and Mzembe (2012), result was about the advantage of the empowerment of the employee specifically, to enhance the quality, service, and the outcome of the firm so it will lead to raise the profit for improving the efficiency and minimize the cost. Nzuve and Bakari (2012) research result showed that the empowerment of the employee has a significant positive impact on performance. Cummings & Wong (2009), the type of leadership is positive associated with the employee and the customers. Samat, et. al. (2006) the result showed that the empowerment of the employee, the knowledge and interaction, customer focus, and continuous improvement impact significant of service quality while empowerment of the employee and customer focus has a significant impact on the market orientation. Chin and Pun (2002), (TQM) the most common support to each employee in the firms so it linked business process to get the best result to the customers wants and need.

### **First: Discussing the main hypothesis of the study**

This study was dedicated to answering the study main questions: What is the impact of total quality management (TQM) on internal growth strategy in private medical diagnostic Labs?

the result confirmed that there is a statistically significant impact of (TQM) represented by (leadership, process management, continuous improvement, customer focus) on internal growth strategy in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ). This significant impact was observed from the results of  $R^2$  that was 0.795, which means that 79.5% of internal growth strategy can be determined through (TQM).

### **Second: discussing of the first sub-Hypothesis**

This study was dedicated to answering the study sub-questions: What is the impact of Leadership on internal growth strategy in private medical diagnostic labs?

The result confirmed that there is a statistically significant impact of leadership on internal growth strategy in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ). This significant impact was observed from the results of  $R^2$  that was 0.627, which means that 62.7% of internal growth strategy can be determined through Leadership.

### **Third: Discussing the second sub-hypothesis**

This study was dedicated to answering the study sub-questions: What is the impact of process management on internal growth strategy in private medical diagnostic labs?

A statistically significant impact of process management on internal growth strategy in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ). This significant impact was observed from the results of  $R^2$  that was 0.551, which means that 55.1% of internal growth strategy can be determined through process management.

### **Fourth: Discussing the third sub-hypothesis**

This study was dedicated to answering the study sub-questions: What is the impact of continuous improvement on internal growth strategy in private medical diagnostic labs?

A statistically significant impact of process management on internal growth strategy in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ). This significant impact was observed from the results of  $R^2$  that was 0.663, which means that 66.3% of internal growth strategy can be determined through continuous improvement.

### **Fifth: Discussing the fourth sub-hypothesis**

This study was dedicated to answering the study sub-questions: What is the impact of customer focus on internal growth strategy in private medical diagnostic labs?

A statistically significant impact of continuous improvement on internal growth strategy in private medical diagnostic labs in Amman-Jordan at a significant level ( $\alpha \leq 0.05$ ). This significant

impact was observed from the results of  $R^2$  that was 0.606, which means that 60.6% of internal growth strategy can be determined through customer focus.

### **5.3 Conclusion**

Day after day, the uncertain has the major global trend that influences the environment of the business in most sectors, so it becomes harder for the companies to overcome the constantly faced challenges and satisfy the customers. Total quality management (TQM) is essential to enable the delivery of efficient and effective medical services and to achieve patient satisfaction moreover, to understand the importance of the dimension of (TQM).

To accomplish this research, we started by identifying the principal of (TQM) and its dimension presented in the literature. Next, we used this set of (TQM) to formulate our conceptual model that showed the impact of (TQM) on internal growth strategy. Four hypotheses concerning the relations between the factors of the model were specified. Based on the result of the study the researcher concludes the following:

1. The level of TQM represents by leadership, process management, continuous improvement, customer focus as well as an internal growth strategy in private medical diagnostic labs in Amman-Jordan was high. This indicates the level of awareness regarding TQM is high to compete other labs.
2. The level of Leadership in private medical diagnostic labs was high, and this indicates that the managers can be creative, give the employees new ideas, the empowerment to solve the problem, seek responsibilities and achieve the goals of the companies.

3. The level of process management in private medical diagnostic labs was high, and this indicates to improve quality, improve customer satisfaction, and reduce risk.
4. The level of continuous improvement in private medical diagnostic labs was high, and this indicates eliminate waste, reduce cost and improve the requirements of the patients.
5. The level of customer focus in private medical diagnostic labs was high, and this indicates that the success of the organization is customer focus depends on their satisfactions.
6. The level improvements of internal growth strategy in private medical diagnostic labs were high, and this indicates to grow the business within the organization using internal resources to increase their assets, sales, number of employees and branches.

In summary, the main findings for descriptive analysis show that respondents agree on the high importance of (TQM) represent by leadership, process management, continuous improvement, customer focus as well as an internal growth strategy in private medical diagnostic labs in Amman-Jordan. Besides, the results of correlation analysis showed strong relationship between internal growth strategy and (TQM) dimensions; this indicates that the managers and employees working at Bio-labs & Med-labs in Amman-Jordan are aware of the importance of the implantation of TQM variables. Finally, the results of the multiple regressions analysis showed that there is a significant positive impact of (TQM) represented by (leadership, process management, continuous improvement, customer focus) on internal growth strategy in private medical diagnostic labs in Amman.

## 5.4 Recommendations

Based on the current study results, the study presents the following recommendations for private medical diagnostic labs in Jordan:

1. The current study recommends promoting the concept of TQM among their employees and highlight the importance and advantages resulted from adopting TQM as a key tool and technique to gain and sustain competitive advantage.
2. Focusing on continuous improvement.
3. Provide an obvious image of the company's vision to all employees in order for them to achieve the company's goal, develop their work, and expand internally by linking them to sections that will help them improve their skills and abilities.
4. The study shed light on the importance of the interaction of the interest between workers and customers to achieve the requirements of the customers.

### **Recommendations for Academic researchers and potential studies:**

1. The study recommends adding more dimensions to total quality management (TQM) in further studies to highlight the importance of (TQM) through different dimensions and to test the implementation level.
2. The study is directed to the Jordanian private medical diagnostic labs industry. further studies are needed to examine whether the result of this study can be generalized to other industries.
3. The study has a limited period which is during the COVID-19 pandemic, thus the pandemic ends more investigations are needed to check the industry development.

## 6. References

Abbas, J., 2019. Impact of total quality management on corporate green performance through the mediating role of corporate social responsibility. *Journal of Cleaner Production* 242, 118458.

Abdallah, A. B. (2013). The influence of " soft" and " hard" total quality management (TQM) practices on total productive maintenance (TPM) in Jordanian manufacturing companies. *International Journal of Business and Management*, 8(21), 1.

Abd-Elwahed, M. S., & El-Baz, M. A. (2018). Impact of implementation of total quality management: An assessment of the Saudi Industry. *South African Journal of Industrial Engineering*, 29(1), 97-107.

Abu Bakar, A. R., & Ahmed, Z. U. (2015). Technology motivation in e-marketing adoption among Malaysian manufacturers. *Journal of Transnational Management*, 20(2), 126-152.

Abu-Mahfouz, S. S. (2019). TQM Practices and Organizational Performance in the Manufacturing Sector in Jordan mediating role of HRM Practices and Innovation. *Journal of management and operation research*, 1(22), 1-12

Abusa, F. (2011). TQM implementation and its impact on organisational performance in developing countries: a case study on Libya.

Abusa, F. M., & Gibson, P. (2013). Experiences of TQM elements on organisational performance and future opportunities for a developing country. *International Journal of Quality & Reliability Management*.

Abuzaid, A. N. (2015). Examination the impact of total quality management practices in achieving strategic agility: applied study on the Jordanian private hospitals. *European Journal of Business and Management*, 7(27), 87-96.

Achtenhagen, L., Brunninge, O., & Melin, L. (2017). Patterns of dynamic growth in medium-sized companies: Beyond the dichotomy of organic versus acquired growth. *Long Range Planning*, 50(4), 457-471.

Addae-Korankye, A. (2013). Total Quality Management (TQM): A Source of competitive advantage. A comparative study of manufacturing and service Firms in Ghana. *International Journal of Asian Social Science*, 3(6), 1293-1305.

Ahmad, A., Khaled, A., Mohammad, A. L., Jais, A. A. A., & Ibrahim, R. (2019). Budget Hotels's™ Online Guest Reviews Regarding Customer Satisfaction. *The Journal of Social Sciences Research*, 5(2), 522-534.

Ahmad, M. F., Zakuan, N., Jusoh, A., & Takala, J. (2013). Review of relationship between TQM and business performance. In *Applied Mechanics and Materials* (Vol. 315, pp. 166-170). Trans Tech Publications Ltd.

Ahmed Mustafa, E. M. (2015). Impact of total quality management practices on innovation in service organizations (*Doctoral dissertation, Universiti Tun Hussein Onn Malaysia*).

Ahmed, A. Y. M. (2020). The Impact of Total Quality Management Multidimensional on Non-Financial Organizational Performance: An Empirical Investigation of Saudi Commission for Tourism and National Heritage Hotels. *International Journal of Business and Social Science*, 11(3).

Ahuja, K., Segel, L., & Perrey, J. (2017). Mastering three strategies of organic growth. *McKinsey & Company Quartely*, 1-8.

Aized, T. (Ed.). (2012). Total quality management and six sigma. BoD–Books on Demand.

Akgunduz, Y., & Eryilmaz, G. (2018). Does turnover intention mediate the effects of job insecurity and co-worker support on social loafing?. *International Journal of Hospitality Management*, 68, 41-49.

Akram, K., Siddiqui, S. H., Nawaz, M. A., Ghauri, T. A., & Cheema, A. K. H. (2011). Role of knowledge management to bring innovation: an integrated approach. *Cell*, 92(333), 6183035.

Aladwan, Z. (2017). The Impact of Knowledge Management Processes on Workforce Agility: An Empirical Investigation at Pharmaceutical Companies in Jordan. *Unpublished master thesis*, Middle East University, Amman, Jordan.

Aladwan, Z. (2017). The Impact of Knowledge Management Processes on Workforce Agility: An Empirical Investigation at Pharmaceutical Companies in Jordan. *Unpublished master thesis*, Middle East University, Amman, Jordan.

Alaoun, N. Y. (2018). The Effect of Total Quality Management Practices on Competitive Priorities of Telecommunication Companies in Qatar (رثأ تاسرامم إ Doctoral dissertation, Middle East University).

Al-Bourini, F. A., Al-Abdallah, G. M., & Abou-Moghli, A. A. (2013). Organizational culture and total quality management (TQM). *International Journal of Business and Management*, 8(24), 95.

Al-Damen, R. A. (2017). The impact of total quality management on organizational performance Case of Jordan Oil Petroleum Company. *International Journal of Business and Social Science*, 8(1), 192-202.

Al-Dhaafri, H. S., Al-Swidi, A. K., & Yusoff, R. Z. B. (2016). The mediating role of TQM and organizational excellence, and the moderating effect of entrepreneurial organizational culture on the relationship between ERP and organizational performance. *The TQM Journal*.6(28), 991-1011.

Aldouraki, A. F. K. (2019). Strategic Leadership Styles and its Impact on Disaster Management: The Moderating Role of Strategic Knowledge A Field Study on the Arab Red Crescent and Red Cross Societies (Doctoral dissertation, Middle East University).

Alenezi, H., & Tarhini, A. (2013). Investigating the strategic relationship between information quality and e-government benefits (Doctoral dissertation, Brunel University).

Aletaiby, A. A. (2018). A framework to facilitate total quality management implementation in the upstream oil industry: an Iraqi case study (Doctoral dissertation, University of Salford).

Alghamdi, F. (2018). Total quality management and organizational performance: A possible role of organizational culture. *International Journal of Business Administration*, 9(4), 186-200.

Al-Hinn, N. K. (2018). Analysis the Relationship between Big Data and Knowledge Management Process: A Field Study in Jordanian Commercial Banks in (Doctoral dissertation, Middle East University).

Al-Hummadi, B. A. (2013). Leadership, employee satisfaction and turnover in the UAE public sector (Doctoral dissertation, The British University in Dubai (BUiD)).

Ali, K. A. M., & Alolayyan, M. N. (2013). The impact of total quality management (TQM) on the hospital's performance: an empirical research. *International Journal of Services and Operations Management*, 15(4), 482-506.

Al-Qahtani, N. D., Alshehri, S. S. A., & Aziz, A. A. (2015). The impact of Total Quality Management on organizational performance. *European Journal of Business and Management*, 7(36), 119-127.

Al-Sarayreh, A., Amal, A. S., Rasha, A. M., Nawal, A. F., Ayoub, M., Salem, A. T., ... & Osama, S. (2019). The Impact of TQM on Employee Performance Abu Sheikha Exchange Company: Case Study. *International Journal of Human Resource Studies*, 9(2), 212-224.

Al-Shawabkeh, Z. A. A. H. (2019). The Impact of Total Quality Management Practices on Strategic Agility in Jordanian Concrete.

Alzalabani, A. H., & Mzembe, D. (2012). Employee empowerment in the royal commission at Yanbu. *China-USA Business Review*, 11(5).

Alzoubi, H. M., & Khafajy, N. (2015). The impact of business process management on business performance superiority. *International Journal of Business and Management Review*, 3(2), 17-34.

Amankwaa, A., & Anku-Tsedee, O. (2015). The moderating effect of alternative job opportunity on the transactional leadership-turnover intention nexus: Evidence from the Ghanaian banking industry. *African Journal of Business Management*, 9(14), 553-561.

Antunes, M. G., Quirós, J. T., & Justino, M. D. R. F. (2017). The relationship between innovation and total quality management and the innovation effects on organizational performance. *International Journal of Quality & Reliability Management*. 9(34), 1474-1492

Arumugam, V., Ooi, K. B., & Fong, T. C. (2008). TQM practices and quality management performance. *The TQM Journal*. Vol(20), No(6), PP 636-650.

Bailie, R., Matthews, V., Larkins, S., Thompson, S., Burgess, P., Weeramanthri, T., ... & Clark, L. (2017). Impact of policy support on uptake of evidence-based continuous quality improvement activities and the quality of care for Indigenous Australians: a comparative case study. *BMJ open*, 7(10), e016626.

Baltina, A., Bolodurina, M., & Gorbatenko, E. (2018). The application of information technologies in the development of corporate growth strategy. *In CEUR Workshop Proceedings (pp. 58-66)*.

Banabo, J., & Koroye, B. (2012). Strategic marketing: A panacea for mergers and acquisition as a survival strategy for firms in Nigeria. *American International Journal of Contemporary Research 2 (5): 1-10; Available at*.

Barney, J. B. (1998). Returns to bidding firms in mergers and acquisitions: Reconsidering the relatedness hypothesis, *Strategic Management Journal*, Vol 9.

Bashan, A., & Notea, A. (2018). A hierarchical model for quality management systems in global organizations. *International Journal of Quality & Reliability Management*.

Baum, J. R., Locke, E. A., & Smith, K. G. (2001). A multidimensional model of venture growth. *Academy of management journal*, 44(2), 292-303.

Bergman, B., & Klefsjö, B. (2010). Quality from customer needs to customer satisfaction. Studentlitteratur AB.

Besterfield Dale H. (2011). Total Quality Management,(Revised Edition). Pearson Education India.

Bhardwaj, S., Barron, P., Pillay, Y., Treger-Slavin, L., Robinson, P., Goga, A., & Sherman, G. (2014). Elimination of mother-to-child transmission of HIV in South Africa: rapid scale-up using quality improvement. *South African Medical Journal*, 104(3), 239-243.

Bitmiş, M. G., & Ergeneli, A. (2013). The role of psychological capital and trust in individual performance and job satisfaction relationship: A test of multiple mediation model. *Procedia-Social and Behavioral Sciences*, 99, 173-179.

Bruner, R. F., & Perella, J. R. (2004). *Applied mergers and acquisitions* (Vol. 173). John Wiley & Sons.

Burli, S. B., Kotturshettar, B. B., & Dalmia, R. V. (2012). Multiple performance measures: Six TQM practices. *SCMS Journal of Indian Management*, 9(1), 69.

Calvo-Mora, A., Picón, A., Ruiz, C., & Cauzo, L. (2014). The relationships between soft-hard TQM factors and key business results. *International Journal of Operations & Production Management*.

Camilleri, M. A. (2018). Travel marketing, tourism economics and the airline product: An introduction to theory and practice. *Springer International Publishing*.

Chang, H. H. (2005). The influence of continuous improvement and performance factors in total quality organization. *Total Quality Management & Business Excellence*, 16(3), 413-437.

Chen, C. K., Anchecta, K., Lee, J. D., & Dahlgaard, J. J. (2016). A stepwise ISO-based TQM implementation approach using ISO 9001: 2015. *Management and Production Engineering Review*, 7.

Chin, K. S., & Pun, K. F. (2002). A proposed framework for implementing TQM in Chinese organizations. *International Journal of Quality & Reliability Management*.

Cho, Y. S., Jung, J. Y., & Linderman, K. (2017). The QM evolution: Behavioral quality management as a firm's strategic resource. *International Journal of Production Economics*, *191*, 233-249.

Chountalas, P. T., Magoutas, A. I., & Zografaki, E. (2019). The heterogeneous implementation of ISO 9001 in service-oriented organizations. *The TQM Journal*.

Cox, R. H., & Béland, D. (2013). Valence, policy ideas, and the rise of sustainability. *Governance*, *26*(2), 307-328.

Cui, A. P., Walsh, M. F., & Gallion, D. (2011). Internationalization challenges for SMEs and global marketing managers: A case study. *International Journal of Business and Social Research (IJBSR)*, *1*(1), 57-69.

Dabestani, R., Shahin, A., Shirouyehzad, H., & Saljoughian, M. (2017). A comparative study of ordinary and fastidious customers' priorities in service quality dimensions. *Total Quality Management & Business Excellence*, *28*(3-4), 331-350.

Dalton, D. R., & Dalton, C. M. (2006). Corporate growth: Our advice for directors is to buy organic. *Journal of Business Strategy*, *27*(2), 5-7.

Debrah, K. P. (2012). The effect of strategic planning on the performance and operations of the Agricultural Development Bank (Doctoral dissertation).

Dedy, A. N., Zakuan, N., Omain, S. Z., Rahim, K. A., Ariff, M. S. M., Sulaiman, Z., & Saman, M. Z. M. (2016). An analysis of the impact of total quality management on employee

performance with mediating role of process innovation. *In IOP Conference Series: Materials Science and Engineering. Anais.*

Dedy, A. N., Zakuan, N., Omain, S. Z., Rahim, K. A., Ariff, M. S. M., Sulaiman, Z., & Saman, M. Z. M. (2016). An analysis of the impact of total quality management on employee performance with mediating role of process innovation. *In IOP Conference Series: Materials Science and Engineering. Anais.*

Deming, W. E. (1986). *Out of the crisis* Cambridge, Massachusetts: Massachusetts Institute of Technology.

Demirbag, M., Tatoglu, E., Tekinkus, M., & Zaim, S. (2006). An analysis of the relationship between TQM implementation and organizational performance: evidence from Turkish SMEs. *Journal of manufacturing technology management.*

Denrell, J., Fang, C., & Winter, S. G. (2003). The economics of strategic opportunity. *Strategic Management Journal*, 24(10), 977-990.

Deraz, H., & Gebrekidan, D. A. (2018). The Impact of Adopting Digital Marketing (Digitalization) on SMEs Performance: A Study of Small and Medium Size Retailing and Manufacturing Firms in Sweden. Hossam Deraz.

Dilber, M., Bayyurt, N., Zaim, S., & Tarim, M. (2005). Critical factors of total quality management and its effect on performance in health care industry: a Turkish experience. *Problems and Perspectives in Management*, (4), 220-234.

do Nascimento Gambi, L., Gerolamo, M. C., & Carpinetti, L. C. R. (2013). A theoretical model of the relationship between organizational culture and quality management techniques. *Procedia-Social and Behavioral Sciences*, 81, 334-339.

Dugguh, S. I., Aki, I., & Isaac, S. O. (2018). Impact of Growth Strategies on Business Profit A Study of Ashakacem Plc, Gombe-Nigeria. *IOSR Journal of Business and Management (IOSR-JBM)*, 20(2), 23-29.

Durmaz, Y., & İlhan, A. (2015). Growth strategies in busynesses and a theoretical approach. *International Journal of Business and Management*, 10(4), 210.

Durmaz, Y., & İlhan, A. (2015). Growth strategies in busynesses and a theoretical approach. *International Journal of Business and Management*, 10(4), 210.

El-Tohamy, A. E. M. A., & Al Raoush, A. T. (2015). The impact of applying total quality management principles on the overall hospital effectiveness: an empirical study on the HCAC accredited governmental hospitals in Jordan. *European Scientific Journal*, 11(10).

Emefiele, G. I. (2008). Why Zenith Bank opted for organic growth instead of merger and acquisition.

Endara, Y. M., Ali, A. B., & Ab Yajid, M. S. (2019). The influence of culture on service quality leading to customer satisfaction and moderation role of type of bank. *Journal of Islamic Accounting and Business Research*.

Eniola, A. A., Olorunleke, G. K., Akintimehin, O. O., Ojeka, J. D., & Oyetunji, B. (2019). The impact of organizational culture on total quality management in SMEs in Nigeria. *Heliyon*, 5(8), e02293.

Esaki, K. (2016). Common Management Process Model of new TQM based on the situation analysis. *Intelligent Information Management*, 8(6), 181-193.

Essa, M. B. (2018). Examining the Relationship between Strategic Leadership, Leadership Styles and Knowledge Sharing in the Electric Power Sector in Jordan (Doctoral dissertation, Alliant International University).

EVANS, J. R., & LINDSAY, W. M. (2017). *Managing for Quality*.

Fening, F. A., Amaria, P., & Frempong, E. O. (2016). Linkages between total quality management and organizational survival in manufacturing companies in Ghana.

Flynn, B. B., Schroeder, R. G., & Sakakibara, S. (1994). A framework for quality management research and an associated measurement instrument. *Journal of Operations management*, 11(4), 339-366.

Franz, P., & Kirchmer, M. (2012). *Value-driven business process management: The value-switch for lasting competitive advantage*. McGraw Hill Professional.

Fuentes, M. M. F., Montes, F. J. L., & Fernández, L. M. M. (2006). Total quality management, strategic orientation and organizational performance: the case of Spanish companies. *Total Quality Management & Business Excellence*, 17(3), 303-323.

Gambatese, J. A., & Hallowell, M. (2011). Factors that influence the development and diffusion of technical innovations in the construction industry. *Construction Management and Economics*, 29(5), 507-517.

Gemina, D., Silaningsih, E., & Andari, T. T. (2015). Implementasi Total Quality Management Berkaitan dengan Manajerial Perusahaan dan Keunggulan Bersaing (Implementation of Total Quality Management Related to Company Managerial and Competitive Advantage). *Jurnal Aplikasi Manajemen*, 13(1), 149-157.

Gharakhani, D., Rahmati, H., Farrokhi, M. R., & Farahmandian, A. (2013). Total quality management and organizational performance. *American Journal of Industrial Engineering*, 1(3), 46-50.

Gimenez-Espin, J. A., Jiménez-Jiménez, D., & Martínez-Costa, M. (2013). Organizational culture for total quality management. *Total Quality Management & Business Excellence*, 24(5-6), 678-692.

Głodowska, A., Pera, B., & Wach, K. (2016, December). International Environment and its Influence on the Entrepreneurial Internationalisation of the Firm: The Case of Polish Businesses. In *Advancing Research in Entrepreneurship in Global Context: Conference Proceedings of the 8th ENTRE Conference*. Kraków: Cracow University of Economics.

Goetsch, D. L., & Davis, S. B. (2016). *Quality Management for Organizational Excellence: Introduction to Total Quality, Person Education*.

Grewatsch, S., & Kleindienst, I. (2017). When does it pay to be good? Moderators and mediators in the corporate sustainability–corporate financial performance relationship: A critical review. *Journal of Business Ethics, 145*(2), 383-416.

Gul, A., Jafery, S. A. S., Rafiq, J., & Naeem, H. (2012). Improving employees performance through total quality management. *International Journal of Economics and Management Sciences, 1*(8), 19-24.

Gupta, C., & Belokar, R. M. (2014). Applications of total quality management in Indian airline industry. *International Journal of Science and Research, 3*(5), 1077-1081.

Haile, Y., & Raju, S. (2016). The extent of TQM practices in Ethiopian manufacturing firms: An empirical evaluation. *International Journal of Applied Research, 2*(5), 238-244.

Hair Jr, 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*.

Haque, A., Sarwar, A., Azam, F., & Yasmin, F. (2014). Total quality management practices in the Islamic banking industry: comparison between Bangladesh and Malaysian Islamic bank. *International Journal of Ethics in Social Sciences, 2*(1).

Hashemi, S. A., & Dehghanian, F. (2017). A survey and analysis of the relationship between human resources management and organizational performance. *Engineering, Technology & Applied Science Research, 7*(6), 2200-2204.

Helaly, M. (2012). The impact of IS/IT strategy and business strategy alignment on business performance in the Palestinians firms (Doctoral dissertation).

Honarpour, A., Jusoh, A., & Md Nor, K. (2018). Total quality management, knowledge management, and innovation: an empirical study in R&D units. *Total Quality Management & Business Excellence*, 29(7-8), 798-816.

Hussain, S., Khattak, J., Rizwan, A., & Latif, M. A. (2013). ANSOFF matrix, environment, and growth-an interactive triangle. *Management and Administrative Sciences Review*, 2(2), 196-206.

Insalaca, V. G. (2017). The impact of growth strategies on the performance of large food and beverage companies.

Irtaimah, H., Al-Azzam, Z. F., & Al-Qura'an, A. (2016). Impact of intellectual capital on Carrefour internal growth strategies (Ansoffs Model) in Governorate of Irbid. *European Journal of Business Management*, 8(5).

Irtaimah, H., Al-Azzam, Z. F., & Al-Qura'an, A. (2016). Impact of intellectual capital on Carrefour internal growth strategies (Ansoffs Model) in Governorate of Irbid. *European Journal of Business Management*, 8(5).

Jabeen, R., Shehu, A. M., Mahmood, R., & Bambale, A. J. A. (2015). Total quality management dimensions and SME performance: A quantitative approach. *International Postgraduate Business Journal*, 7(1), 21-35.

Javidroozi, V., Shah, H., & Feldman, G. (2019). A framework for addressing the challenges of business process change during enterprise systems integration. *Business Process Management Journal*.

Jeanes, E. (2017). Are we ethical? Approaches to ethics in management and organisation research. *Organization*, 24(2), 174-197.

Jimoh, R., Oyewobi, L., Isa, R., & Waziri, I. (2019). Total quality management practices and organizational performance: the mediating roles of strategies for continuous improvement. *International Journal of Construction Management*, 19(2), 162-177.

Johnson, J. K., & Sollecito, W. A. (2018). McLaughlin & Kaluzny's continuous quality improvement in health care. Jones & Bartlett Learning.

Jonah, N., Ornguga, I. G., & Torsen, E. (2018). The Effect of Total Quality Management (TQM) on the Organizational Growth of Adama Beverages: A Marketing Mix Perspective. *International Journal of Science and Research*, 7, 7, 1096-1102.

Kafetzopoulos, D., Gotzamani, K., & Gkana, V. (2015). Relationship between quality management, innovation and competitiveness. Evidence from Greek companies. *Journal of Manufacturing Technology Management*. 8(26), 1177-1200.

Kaur, P., & Sharma, S. K. (2014). Evaluating the Relationship and Influence of Critical Success Factors of TQM on Business Performance: Evidence from SMEs of Manufacturing Sector. *IUP Journal of Operations Management*, 13(4).

Khan, M. N., Malik, S. A., & Janjua, S. Y. (2019). Total Quality Management practices and work-related outcomes. *International Journal of Quality & Reliability Management*, 6(36), 864-874

Kim, D. Y., Kumar, V., & Kumar, U. (2012). Relationship between quality management practices and innovation. *Journal of operations management*, 30(4), 295-315.

Koks, S. C., & Kilika, J. M. (2016). Towards a Theoretical Model Relating Product Development Strategy, Market Adoption and Firm Performance: A Research Agenda. *Journal of Management and Strategy*, 7(1), 90.

Kor, Y. Y., Mahoney, J. T., & Michael, S. C. (2007). Resources, capabilities and entrepreneurial perceptions. *Journal of management studies*, 44(7), 1187-1212.

Kor, Y. Y., Mahoney, J. T., Siemsen, E., & Tan, D. (2016). Penrose's The Theory of the Growth of the Firm: An exemplar of engaged scholarship. *Production and Operations Management*, 25(10), 1727-1744.

Krystallis, A., & Chrysochou, P. (2014). The effects of service brand dimensions on brand loyalty. *Journal of Retailing and Consumer Services*, 21(2), 139-147.

Kumar, R., Garg, D., & Garg, T. K. (2011). TQM success factors in North Indian manufacturing and service industries. *The TQM Journal*. 23(1), 36-46.

Kumar, V., Singh, J., Kumar, D., & Antil, M. (2016). National Journal of Advanced Research Online ISSN: 2455-216X; Impact Factor: RJIF 5.12 [www. allnationaljournal. com](http://www.allnationaljournal.com) Volume 2; Issue 3; May 2016; Page No. 05-08. *Total quality management*, 2(3).

Kurupparachchi, D., & Perera, H. S. C. (2010). Impact of TQM and technology management on operations performance. *IUP Journal of Operations Management*, 9(3). P23-47

Kyläheiko, K., Jantunen, A., Puumalainen, K., Saarenketo, S., & Tuppurä, A. (2011). Innovation and internationalization as growth strategies: The role of technological capabilities and appropriability. *International business review*, 20(5), 508-520.

Leminen, S., & Westerlund, M. (2012). Categorizing the growth strategies of small firms.

Li, J., Papadopoulos, C. T., & Zhang, L. (2016). Continuous improvement in manufacturing and service systems.

Li, W. (2018). Research on the innovative development mode of quality education of college students based on the perspective of human resource management. *Educational Sciences: Theory & Practice*, 18(5).

Lin, C. S., Chang, R. Y., & Dang, V. T. (2015). An integrated model to explain how corporate social responsibility affects corporate financial performance. *Sustainability*, 7(7), 8292-8311.

Long, C. (2000). Measuring your strategic agility. *Consulting to Management*, 11(3), 25.

Long, C. S., Abdul Aziz, M. H., Kowang, T. O., & Ismail, W. K. W. (2015). Impact of TQM practices on innovation performance among manufacturing companies in Malaysia. *South african journal of industrial engineering*, 26(1), 75-85.

Lynch, R. (2006). International acquisition and other growth strategies: some lessons from the food and drink industry. *Thunderbird International Business Review*, 48(5), 605-622.

Madanat, H. G., & Khasawneh, A. S. (2017). Impact of total quality management implementation on effectiveness of human resource management in the jordanian banking sector from EMPLOYEES'PERSPECTIVE. *Academy of Strategic Management Journal*, 16(1).

Mahmood, S., & Ahmed, A. (2014). Relationship between TQM dimensions and organizational performance. *Pakistan Journal of Commerce and Social Sciences*, 8(3), 662-679.

Mai, A. A. Y., Osama, S., Mais, H., & Musa, Q. The Impact of TQM on Employee Performance Abu Sheikha Exchange Company: Case Study.

Majstorovic, V. D., Durakbasa, N. M., Heine, I., Schmitt, R., & Beaujean, P. (2016). Critical incidents of quality orientation in lower and middle management. *The TQM Journal*.5(28), 734-744.

Maletic, D., & Maletic, M. (2012). The relationship between continuous improvement and maintenance performance. *Journal of Quality in Maintenance Engineering*, 18(1), 30-41.

Malik, M. F., & Akhtar, S. (2017). Effect of Emotional Ambivalence on Employee Creativity. *Journal of Hotel & Business Management*, 6(166), 2169-0286.

Maravilhas, S., & Martins, J. (2019). Strategic knowledge management in a digital environment: Tacit and explicit knowledge in Fab Labs. *Journal of business research*, 94, 353-359.

Marris, R., & Mueller, D. C. (1980). The corporation, competition, and the invisible hand. *Journal of Economic Literature*, 18(1), 32-63.

Martinez, F. (2019). Process excellence the key for digitalisation. *Business Process Management Journal*.(vol. 25, No. 7,PP. 1716-1733)

Mbithi, B., Muturi, W., & Rambo, C. (2015). Effect of product development strategy on performance in sugar industry in Kenya. *International Journal of Academic Research in Business and Social Sciences*, 5(12), 326-341.

McCann, J., & Sparks, B. (2018). The relationship of servant leadership in the classroom and student perceptions of university quality of instruction. *Archives of Business Research*, 6(6), 119-133.

Miles, R. E., Snow, C. C., Meyer, A. D., & Coleman Jr, H. J. (1978). Organizational strategy, structure, and process. *Academy of management review*, 3(3), 546-562.

Miller, W. J. (1996). A working definition for total quality management (TQM) researchers. *Journal of Quality Management*, 1(2), 149-159.

Miriam, J. (2006). Organic vs inorganic growth: A case study. *A dissertation presentation for the Degree of MA in Finance and Investment*.

Modilim, P. M. (2016). Strategies for growing and sustaining successful small businesses.

Mohammed, D., Brahma, D., Jagadish, G., & Aderaw, S. (2019). Impact of Total Quality Management (TQM) on Operational Performance of Ethiopian Pharmaceutical Manufacturing Plants. *International Journal of Engineering and Management Research e-ISSN, 2250-0758*.

Mohd. Hamizan Abdul Aziz. (2014). The Impact of Total Quality Management (TQM) Practices on Innovation Performance (Doctoral dissertation, Universiti Teknologi Malaysia).

Mokhtar, N. F. (2013). Choice of Business Aims and Strategies by Small Business Enterprises in Developing Countries, *International Journal of Business and Social Science, 4(9), 247-255*.

Moreno, A. M., & Casillas, J. C. (2007). High-growth SMEs versus non-high-growth SMEs: a discriminant analysis. *Entrepreneurship and regional development, 19(1), 69-88*.

Mosadeghrad, A. M. (2013). Obstacles to TQM success in health care systems. *International Journal of Health Care Quality Assurance*

Munizu, M. (2013). The Impact of total quality management practices towards competitive advantage and organizational performance: Case of fishery industry in South Sulawesi Province of Indonesia. *Pakistan Journal of Commerce and Social Sciences (PJCSS), 7(1), 184-197*.

Munizu, M. (2013). The Impact of total quality management practices towards competitive advantage and organizational performance: Case of fishery industry in South Sulawesi Province of Indonesia. *Pakistan Journal of Commerce and Social Sciences (PJCSS), 7(1), 184-197*.

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.

Mustapha, M. R., Muda, M. S., & Hasan, F. (2011). A survey of total quality management in the Malaysian small and medium sized manufacturing companies. *International Journal of Humanities and Social Science*, 1(2), 118-122.

mutia, s. (2013). an investigation into internal growth strategies effect on financial performance of commercial banks,(a case study of equity bank in nairobi).

Ngambi, M. T., & Nkemkifiafu, A. G. (2015). The impact of total quality management on firm's organizational performance. *American Journal of Management*, 15(4), 69.

Nickols, F. (2016). Strategy, strategic management, strategic planning and strategic thinking. *Management Journal*, 1(1), 4-7.

Nicol, J. (1997). Beyond Total Quality Management: Toward the Emerging Paradigm. *Personnel Review*, 488-488.

Nurhayati, N., & Mulyani, S. (2015). User participation on system development, user competence and top management commitment and their effect on the success of the implementation of accounting information system (empirical study in Islamic bank in Bandung). *European Journal of Business and Innovation Research*, 3(2), 56-68.

Nyamari, P. M. (2017). Effect of total quality management practices on operational performance of commercial banks in Mombasa County, Kenya. Unpublished Master of Business Administration research project, University of Nairobi.

Nzuve, S. N., & Bakari, T. H. (2012). The relationship between empowerment and performance in the city council of Nairobi. *Problems of Management in the 21st Century*, 5, 83.

Obonyo, M. A. (2015). Growth strategies and performance of Safaricom limited in Kenya (Doctoral dissertation, University of Nairobi).

Osman, I., Ho, T. C., & Galang, M. C. (2011). The relationship between human resource practices and firm performance: an empirical assessment of firms in Malaysia. Business Strategy Series.

Øvretveit, J., & Al Serouri, A. (2006). Hospital quality management system in a low income Arabic country: an evaluation. *International Journal of Health Care Quality Assurance*, 5(19), 516-532

Ozidal, M. A., & Oyebamiji, B. F. (2018). Implementation of Total Quality Management and its Effect on Employees' Performance in a Teaching Hospital in Oyo State, Nigeria. *Public Health Open Access*, 2(3).

Pambreni, Y., Khatibi, A., Azam, S., & Tham, J. (2019). The influence of total quality management toward organization performance. *Management Science Letters*, 9(9), 1397-1406.

Porter, M. E. (1997). *Competitive Strategy, measuring business excellence*. Vol. 1 No. 2, pp. 12-17.

Prajapati, A. (2021). Types of Growth Strategies, online form <https://www.economicdiscussion.net/strategic-management/types-of-growth-strategies/31914>

Prayhoego, C. A. (2013). Analisa Pengaruh Total Quality Management Terhadap Keunggulan Bersaing dan Kinerja Perusahaan. *Business Accounting Review*, 1(2), 236-245.

Psomas, E., Vouzas, F., & Kafetzopoulos, D. (2014). Quality management benefits through the “soft” and “hard” aspect of TQM in food companies. *The TQM Journal*.26(5), 431-444

Qasrawi, B. T., Almahamid, S. M., & Qasrawi, S. T. (2017). The impact of TQM practices and KM processes on organisational performance An empirical investigation. *International Journal of Quality & Reliability Management*, 34(7), 1034-1055.

Rad, A. M. M. (2005). A survey of total quality management in Iran: Barriers to successful implementation in health care organizations. *Leadership in Health Services*.

Rafailidis, A., Trivellas, P., & Polychroniou, P. (2017). The mediating role of quality on the relationship between cultural ambidexterity and innovation performance. *Total Quality Management & Business Excellence*, 28(9-10), 1134-1148.

Rono, J., & Makori, M. (2015). Effect Of growth strategies on the competitiveness of firms in Kenyan cement industry: a case study of east African Portland Cement Company limited. *Strategic Journal of Business & Change Management*, 2(110), 1737-1774.

Sabella, A., Kashou, R., & Omran, O. (2014). Quality management practices and their relationship to organizational performance. *International Journal of Operations & Production Management*.

Sachdeva, A., Bhardwaj, A., & Sharma, V. S. (2007). Impact of ISO 9000 certification on performance of SMEs: a study of Indian industry. *International Journal of Management Practice*, 2(3), 226-239.

Sadikoglu, E., & Olcay, H. (2014). The effects of total quality management practices on performance and the reasons of and the barriers to TQM practices in Turkey. *Advances in Decision Sciences*.

Sadikoglu, E., & Olcay, H. (2014). The effects of total quality management practices on performance and the reasons of and the barriers to TQM practices in Turkey. *Advances in Decision Sciences*.

Samat, N., Ramayah, T., & Saad, N. M. (2006). TQM practices, service quality, and market orientation. *Management research news*.

Sankowska, A. and Paliszkiewicz, J. (2016), "Dimensions of institutionalized organizational trust and firm's innovativeness", *Journal of Computer Information Systems*, Vol. 56 No. 2, pp. 168-174.

Sari, R. P. (2015). The Implementation of Total Quality Management (TQM) in Small and Medium Manufacturing Company (SMMC) and its Impact to Competitiveness and Performance.

*In The LPEM's Conference on Economics and Finance in Indonesia, 30th November–1st December (pp. 1-14).*

Satyendra (2014), Diversification strategy, online from <https://www.ispatguru.com/diversification-strategy/>.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Students*. 6. utgave. Halow: Pearson Education.

Savolainen, T., & Lopez-Fresno, P. (2013). Trust as Intangible Asset-Enabling Intellectual Capital Development by Leadership for Vitality and Innovativeness. *Electronic Journal of Knowledge Management*, 11(3), pp244-255.

Sayani, H. (2015). Customer satisfaction and loyalty in the United Arab Emirates banking industry. *International Journal of Bank Marketing*.

Schönreiter, I. M. (2018). Methodologies for process harmonization in the post-merger integration phase. *Business Process Management Journal*.

Seethamraju, R. (2012). Business process management: a missing link in business education. *Business Process Management Journal*.

Shafiq, M., & Yu, X. (2017). Effective packet number for 5G im WeChat application at early stage traffic classification. *Mobile Information Systems*, 2017.

Shahmansouri, S., Esfahan, M., & Niki, N. (2013). Explain the theory of competitive advantage and comparison with industries based on advanced technology. *International Journal of Economy, Management and Social Sciences*, 2(10), 841-848.

Singh, V., Kumar, A., & Singh, T. (2018). Impact of TQM on organisational performance: The case of Indian manufacturing and service industry. *Operations Research Perspectives*, 5, 199-217.

Siregar, I., Nasution, A. A., & Sari, R. M. (2017, March). Effect of total quality management on the quality and productivity of human resources. *In IOP Conference Series: Materials Science and Engineering (Vol. 180, No. 1, p. 012116)*. IOP Publishing.

Skalik, J. (2016). Strategic orientation in change management and using it when designing a company's development. *Management*, 20(1), 197-210.

Szymura-Tyc, M. (2013). Measuring the degree of firms' internationalization at their early stages of international commitment. *Journal of Economics & Management*, 13, 101-118.

Taiwo, M. A., Ayodeji, A. M., & Yusuf, B. A. (2012). Impact of small and medium enterprises on economic growth and development. *American journal of business and management*, 1(1), 18-22.

Talib, F. (2013). An overview of total quality management: understanding the fundamentals in service organization. Talib, F.(2013),“An overview of total quality management: understanding the fundamentals in service organization”, *International Journal of Advanced Quality Management*, 1(1), 1-20.

Talib, F., & Rahman, Z. (2010). Studying the impact of total quality management in service industries. *International Journal of Productivity and Quality Management*, 6(2), 249-268.

Tarí, J. J., Claver-Cortés, E., Pereira-Moliner, J., & Molina-Azorín, J. F. (2010). Levels of quality and environmental management in the hotel industry: Their joint influence on firm performance. *International Journal of Hospitality Management*, 29(3), 500-510.

ul Hassan, M., Mukhtar, A., Qureshi, S. U., & Sharif, S. (2012). Impact of TQM practices on firm's performance of Pakistan's manufacturing organizations. *International Journal of Academic Research in Business and Social Sciences*, 2(10), 232.

Upadhyai, R., Jain, A. K., Roy, H., & Pant, V. (2019). A review of healthcare service quality dimensions and their measurement. *Journal of Health Management*, 21(1), 102-127.

Valmohammadi, C., & Roshanzamir, S. (2015). The guidelines of improvement: Relations among organizational culture, TQM and performance. *International Journal of Production Economics*, 164, 167-178.

Wainaina, N. G., & Oloko, M. (2016). Market penetration strategies and organizational growth: A case of soft drink sector in Kenya. *International Journal of Management and Commerce Innovations*, 3(2), 219-227.

Wakchaure, V. D., Nandurkar, K. N., & Kallurkar, S. P. (2014, June). Relationship between implementation of TQM, JIT, TPM and SCM and manufacturing performance: empirical evidences from Indian context. *In International Manufacturing Science and Engineering Conference (Vol. 45806, p. V001T04A033)*. American Society of Mechanical Engineers.

Wan Yusoff, W. F., Loh, C. J., Azizan, A. Z., & Ramin, A. K. (2015). Business strategy of small medium enterprises (SMEs): a case study among selected Chinese SMEs in Malaysia.

WHO, U. (2018). A vision for primary health care in the 21st century: towards universal health coverage and the sustainable development goals. Technical Series on Primary Health Care.

Wilfred, M., Bernard, O., & George, G. E. (2014). An analysis of concentric diversification strategy on organization competitiveness: Case of sugar firms in Kenya. *European Journal of Business and Management*, 6(19), 175-180.

Winston, B. E., & Patterson, K. (2006). An integrative definition of leadership. *International journal of leadership studies*, 1(2), 6-66.

Wong, C. A., & Cummings, G. G. (2009). The influence of authentic leadership behaviors on trust and work outcomes of health care staff. *Journal of Leadership Studies*, 3(2), 6-23.

Wong, W. L., Mohamed, H. A. B., Ananthan, S., Liaw, J. O. H., & Inderjit, S. (2018). Quality Management Dimensions for Sustainable Performance in Military Organisation. *International Journal of Business and Management*, 2(1), 38-42.

Yeng, S. K., Jusoh, M. S., & Ishak, N. A. (2018). The impact of total quality management (TQM) on competitive advantage: a conceptual mixed method study in the Malaysia Luxury Hotel Industries. *Academy of Strategic Management Journal*, 17(2), 1-9.

Yitmen, I. (2011). Intellectual capital: a competitive asset for driving innovation in engineering design firms. *Engineering Management Journal*, 23(2), 3-19.

Youn, S., Yang, M. G. M., Hong, P., & Park, K. (2013). Strategic supply chain partnership, environmental supply chain management practices, and performance outcomes: an empirical study of Korean firms. *Journal of Cleaner Production*, 56, 121-130.

Youssef, M. A. (1996). The impact of total quality management on firms' responsiveness: an empirical analysis. *Total Quality Management*, 7(1), 127-144.

Yusof, S. R. M., & Aspinwall, E. (2000). Total quality management implementation frameworks: comparison and review. *Total quality management*, 11(3), 281-294.

Yusr, M. M., Mokhtar, S. S. M., Othman, A. R., & Sulaiman, Y. (2017). Does interaction between TQM practices and knowledge management processes enhance the innovation performance?. *International Journal of Quality & Reliability Management*.

Zahari, M. K., & Zakuan, N. (2016). The effects of total quality management on the employee performance in Malaysian manufacturing industry. *International Journal of Management and Applied Science*, 2(12), 158-163.

Zaid, A. A., Arqawi, S. M., Mwais, R. M. A., Al Shobaki, M. J., & Abu-Naser, S. S. (2020). The Impact of Total Quality Management and Perceived Service Quality on Patient Satisfaction and Behavior Intention in Palestinian Healthcare Organizations. *Technology Reports of Kansai University*, 62(03), 221-232.

Zakaria, N. S., Hashim, M. K., & Ahmad, S. A. (2016). Business strategy and performance of SMEs in the manufacturing sector. *International Journal in Management & Social Science*, 4(5), 254-261.

Zhang, X., Jiang, S., & Cheng, Y. (2017, April). Inferring the student social loafing state in collaborative learning with a hidden Markov model: a case on slack. *In Proceedings of the 26th International Conference on World Wide Web Companion (pp. 149-152).*

Zhang, Z., Waszink, A. B., & Wijngaard, J. (2000). An instrument for measuring TQM implementation for Chinese manufacturing companies. *International Journal of Quality & Reliability Management.*

## **7. Appendices**

- 1. Names of Academic Referees.**
- 2. Academic Referees Validation letter.**
- 3. Participants Letter.**
- 4. Questionnaire -- English copy**

**Appendix 1: Names of Academic Referees.**

<b>No.</b>	<b>Name</b>	<b>Specialization</b>	<b>University</b>
1	Dr Nidal Al-Salhi	Operations Management and Project Management	University of Petra
2	Dr Mohi-Edden Al-Qutob	Business Administration	University of Petra
3	Dr Ihsan Samara	Business Administration	University of Petra
4	Dr Saed Zighan	Business Administration	University of Petra
5	Dr Majed Al- Masaadeh	Business Administration	Zarqa University
6	Dr Ahmad Areiqat	Philosophy in management	Al-Ahlyeh Amman University
7	Dr Issa Qaddadeh	Business Administration	King Saud univisity
8	Dr Zyad Al-Smadi	Business Administration	Al-Bayet University
9	Dr Hani Abdoh	Business Administration	University of Tabuk

## Appendix 2: Academic referees Validation letter

الدكتور الفاضل:

تحية طيبه وبعد،

أنا الطالبة سرة العبدلي من جامعة البترا، ماجستير إدارة الأعمال، أقوم بإجراء دراسة بعنوان "أثر إدارة الجودة الشاملة على استراتيجيات النمو الداخلي في المختبرات الطبية الأردنية الخاصة" بإشراف الدكتور إبراهيم يوسف.

بالنظر لما تتمتعون به من مكانه علميه وخبره وكفاءه بحثيه رصينه، تضع الباحثة بين أيديكم هذه الاستبانة لتحكيمها وإبداء آرائكم فيها، فيما ترونه مناسباً.

الباحثة: سرة العبدلي

رقم الهاتف: 0795339907

الإيميل : [sara.h94@live.co.uk](mailto:sara.h94@live.co.uk)



## Academic Questionnaire

### Dear Participant:

This questionnaire is a part of a thesis titled: *The Impact of Total Quality Management on Internal Growth Strategy in Jordanian Private Medical diagnostic Labs*. This questionnaire includes 25 primary questions, which cover all variables of the study, and may take around 15 minutes for you to answer the questions.

Your answers will make a significant contribution to academic studies, as well as give practical contributions and being future development to Jordanian private medical labs. All information and opinions you provide will be treated confidentially and will not be disclosed to any person or party; they will be only used for academic purposes.

**Thank you in advance for your support and assistance.**

### Student:

**Sarra AL Abdali**

Mobile: 0795339907

e-mail: [sara.h94@live.co.uk](mailto:sara.h94@live.co.uk)

## 4-Questionnaire -- English copy



### Academic Questionnaire

#### Dear Participant:

This questionnaire is a part of a thesis titled: “*The Impact of Total Quality Management on Internal Growth Strategy in Jordanian Private Medical diagnostic Labs.*” This questionnaire of includes mainly 25 primary questions, which cover all variables of the study, and may take only around 15 minutes from you to answer the questions.

Your answers will make a significant contribution to academic studies, as well as bring practical contributions and future development to Jordanian private medical diagnostic labs. All information and opinions you provide will be treated confidentially and will not be disclosed, it will be only any person or party outside being used for academic purposes.

**Thank you in advance for your support and assistance.**

**Student:**  
**Sarra AL Abdali**  
Mobile: 0795339907  
e-mail: [sara.h94@live.co.uk](mailto:sara.h94@live.co.uk)

**Demographic information**

Please respond to the following questions by placing a check mark (√) in the answer box that corresponds to your response.

<b>Gender</b>			
Female	<input type="checkbox"/>	Male	<input type="checkbox"/>
<b>Age</b>			
less than 30 years	<input type="checkbox"/>	Less than 40 years	<input type="checkbox"/>
Less than 50 years	<input type="checkbox"/>	51 Years or above	<input type="checkbox"/>
<b>Years of experience</b>			
Less than 5 years	<input type="checkbox"/>	5 –10 years	<input type="checkbox"/>
11 – 15 Years	<input type="checkbox"/>	16 years or above	<input type="checkbox"/>
<b>Educational level</b>			
Bachelor	<input type="checkbox"/>	High School Diploma	<input type="checkbox"/>
Master	<input type="checkbox"/>	PhD	<input type="checkbox"/>

	<b>Dependent Variable: Internal growth strategy</b>	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	The medical lab has increased its sales compared with the last five years					
2	The medical lab has increased its net profits compared with the last five years					
3	The medical lab has increased the number of the staff compared with last five years					
4	The medical lab has increased the branches compared with previous years					
5	The medical lab has increased the employees' satisfaction in strategy development					

**Independent Variable and dimensions: total quality management**

	<b>Leadership commitment</b>	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	The leadership provide training to all employee					
2	The leadership communicates quality goals to employees					
3	The leadership take quality as their responsibility					
4	The leadership provides evaluations based on quality performance					
5	The medical lab seeks challenges and changes					
	<b>Process management</b>	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	The medical lab receives the samples at the right time					
2	The medical lab responds quickly to patients					
3	The medical lab documents all the results and the events					
4	The medical lab uses standardized activity					
5	The medical lab applies periodical audits					

	<b>Continuous improvement</b>	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	The medical lab uses updated programs to reduce time					
2	The medical lab establishes processes to make the improvements					
3	The medical lab depends on quality tools to improve growth					
4	The medical lab uses preventive solution for expected problems					
5	The medical lab uses core competences to provide a unique service					
	<b>Customer focus</b>					
1	The medical lab checks the feedback from the customers continuously	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
2	The medical lab maintains fast responses to the customers					
3	The medical lab takes the test at the right time					
4	The medical lab documents customer complaints					
5	The medical lab aims to have fully satisfied, highly morale customers.					

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