



Arab American University  
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Assessment of Benchmarking as a Strategic Planning Method as  
Implemented by Palestinian Universities in Adopting Their Master  
Programs

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## **Declaration**

I declare that this thesis has been composed solely by myself and that it has not been submitted by others to earn any degree, or to pass any module. In addition, I am aware of and understand the AAU's policy on plagiarism, and I certify that this thesis is my own work, except where indicated by reference, and the work presented in it has not been submitted by me in support of another degree or qualification from this or any other university or institute of learning

## **Dedication**

This thesis is firstly dedicated to my dear parents “Tareq & Randa” who have always offered me their infinite support, ambition, and power to peruse higher education and to create success by my own efforts. Secondly, I dedicate my efforts to my Grandfather who was and still inspiring and pray for me. Finally, to my dear supervisor and professors at AAU who have always enriched me with valuable knowledge and feedback.

Sincerely: Nour Aljunide

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Sincerely: Nour Aljunide

## **Abstract**

Benchmarking has proved to be an effective strategy in performance enhancement of organizations of various kinds and sizes, and this is why it is counted as a strategic planning option. However, benchmarking as a strategic planning option has not received the attention it deserves from Arabian business and non-business organizations, and the research institutions as well. We believe that some organizations employ, to some extent, benchmarking in planning and implementing their programs and processes, but the fundamental questions in that regard are; what is the percentage of those organizations that take benchmarking as a strategic planning option, and do these organizations that managed to employ it utilized the standard procedure that guarantees high success rates for these operations and processes.

To answer these questions, this study was conducted on Palestinian universities, as the research population, and to examine how they did employ benchmarking in adopting, planning and implementing their master programs. More specifically, the study addressed the extent of implementing benchmarking in planning and adopting master programs by Palestinian universities. It also explored the opportunities for performance improvement as presented by benchmarking as a strategic planning option. As well as exploring the obstacles of implementing benchmarking effectively in the Palestinian universities in West Bank.

In an attempt to achieve the objectives of the research, a sample included nine universities were selected. Fifty questionnaires were correctly filled and validated. The data collected out of these questionnaires were analyzed by SPSS.

The analysis results revealed that universities do implement benchmarking phases; (planning, analysis, integration, action, and maturity) , to a high degree of professionalism. The analysis, also revealed that the major obstacles for benchmarking adaptor implement are the lack of cooperation of top management, and concerned staff members, in addition to the incurred cost of the whole process.

One major contribution of this study, which distinguishes this study is the success in building a regression model for the overall process effectiveness (of the master programs) as a function of the success in implementing the standard benchmarking plan. In addition to the existence of strategic plans by the university and master program, a number of students enrolled annually ,and benchmarking obstacles. The tested model was found significant and reliable with an “R-square” value of 47.8%.

Recommendations including the need to employ benchmarking to ensure that universities compete properly with other universities and achieve continuous competitive improvement.

**Keywords: Benchmarking, Internal Processes Effectiveness, Master Programs.**

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**List of Abbreviations**

<b>Abbreviation</b>	<b>Explanation</b>
PHEIs	Palestinian Higher Educational Institutions
EFQM	European Benchmarking Code of Conduct
EFA	Exploratory Factor Analysis
FA	Factor analysis
MOHE	Ministry of Higher Education
QM	Quality Management
TQM	Total Quality Management
SPSS	Statistical package for the social sciences

## **Chapter 1: Introduction**

### **1.1 Overview**

Nowadays, companies and corporations in the world of business are constantly changing.

For example, small companies expand, and huge ones dwindle; companies may go backward, and weak companies may flourish. Therefore companies strive to maintain their position by considering extra strength aspects, and weak institutions endeavor to improve their performance and optimize their operations to secure better positions.

To achieve this, many of these companies and institutions try to adopt modern administrative techniques and methods, most notably benchmarking. Benchmarking has proved to be an effective tool that improves the performance of companies and institutions in boosting or at least sustaining their positions among their counterparts and competitors. As defined by the European Benchmarking Code of Conduct (EFQM, 2001), benchmarking is "the process of identifying and learning from good practices in other organizations, and is considered as a powerful tool in the quest for continuous improvement and performance breakthroughs."

Benchmarking requires a continuous comparison between a specific organization and other best practicing organizations to extract lessons and achieve a competitive advantage for this specific organization. Benchmarking includes different stages, steps, and procedures that aim at identifying the organization's strengths and weaknesses for further improvement. Therefore, benchmarking is a continuous process that does not stop if the organization wants to sustain its leading position.

In principle, all organizations, regardless of their size, nature, and operational domain, can implement benchmarking. This research aims at investigating the extent to which universities in west bank implement and practice benchmarking in their endeavors to achieve improvements. Palestinian universities are selected for this study because they are supposed to continuously advance themselves by searching and trying up-to-date administrative approaches that help overcome problems and improve performance.

For these educational institutions, benchmarking is an administrative method that provides them with opportunities to improve their performance by identifying existing gaps in comparison with best practicing universities. This process also includes the identification of opportunities, threats, strengths, and weaknesses, yet again with reference to best practicing institutions.

Furthermore, benchmarking is a unique method that helps to obtain data and information throughout its multiple types of internal and external evaluations. Basili (2010) pointed out that benchmarking is a structured approach to learning, developing, and sharing knowledge with others. In many cases, learning from others helps an organization to outperform its competitors. Benchmarking allows organizations to learn experiences from competitors, the matter that saves efforts and resources and avoids any future recurrence of these mistakes.

University institutions in Palestine are divided in terms of academic, administrative supervision, and funding into three types:

1 - Public: It is independent in terms of funding and academic supervision and administrative, and fall under this type of Palestinian universities nine universities: Islamic

University, Gaza University, Palestine Polytechnic University, Bethlehem University, Birzeit University, Hebron University, Al Quds University, Najah National University, and the Arab Open University (MOHE website, 2018).

2 - Governmental universities: It is under the direct supervision of the MOHE, and this type is limited to five universities: Al-Azhar University, Al-Aqsa University, Al-Quds Open University, Istiqlal University, and Palestine Technical University Khaduri (MOHE website, 2018).

3- Private universities: They are under the direct supervision of private bodies. This type of Palestinian universities is limited to two universities: the Arab American University and the University of Palestine (MOHE website, 2018).

It should be noted that all Palestinian universities of the three types operate under the regulation and supervision of the MOHE.

## **1.2 Problem Statement**

Higher education institutions in Palestine are characterized by an increase in the number of master students (Lamine,2010), which has led to competition among universities to introduce new programs and attract more students as possible.

Studies show that the master programs in most Palestinian universities are still characterized by traditional without resorting to creativity, innovation and direct attention to development issues (Alami& Beshtawi,2015). Therefore, they need the knowledge-based approach and performance evaluation system like benchmarking which leads to improving the performance and have competitive advantages to be superior to other universities. Burquel&Vught(2010) found out benchmarking as a modern management tool helps to set targets for increased performance through inter-organizational learning. Additionally, benchmarking has been successful not only in assisting departments and programs in developing mission and vision statements, organizational goals, and action plans, but also in disseminating organizational information, promoting participation, incorporating new members, and increasing awareness of strengths and opportunities for improvement, ( Immordino,et al., 2016).

Benchmarking is defined as the process of contrasting what an organization is practicing with the best performing organization working in a similar domain(Francis,2011).



Based on the preliminary survey on the subject, the researcher found that research in this vital issue is missing in Palestine context and the knowledge of our university administrations regarding the use of this method is not as it should be. Throughout the study, the researcher will analyze universities' standards and practices in regards to benchmarking and better understand how Palestinian universities practice benchmarking in reality, to what extent these educational institutions practice it in Master programs and how it can be improved.

Different motives to carry out this research. Firstly, due to the scarcity of knowledge within the Palestinian context, the study aims at providing a model that reduces the gap in the knowledge of the subject of benchmarking, including its theories, practices, techniques, and obstacles. Secondly, this study is vital and important for the Palestinian Higher Educational Institutions as it will contribute to enhancing the perception and practices of this modern strategic planning method which will encourage these institutions to implement it. PHEIs are now operating in a highly competitive environment locally, regionally, and globally as well. These institutions will not be able to achieve competitive leading positions without improving their strategic practices including benchmarking as a way to guide their efforts towards competitiveness. Its believe that benchmarking is an effective tool that can be used to determine their deviation from the leading universities. These research efforts will provide the Palestinian universities with a group of recommendations that will assist them to improve and succeed in their future plans. Thirdly, on the level of knowledge, it hopes that this study will be a scientific addition in this vital subject, and opens up new horizons for local researchers towards a better understanding of its potential and best practices, which will maximize its benefits.

### **1.3 Research Objectives and Questions**

This study aims to achieving the following objectives:

- 1- Addressing to what extent Palestinian universities implement benchmarking in the master programs?

To achieve this objective the study aims to answer the following question:

- Do the Directors of masters programs acquire the knowledge on benchmarking method and its dimensions in regards to planning, analysis, integration, action, and maturity?

- 2- Exploring the opportunities for performance improvement and how the obstacles of implementing benchmarking method affect the effectiveness of the internal process.

To achieve this objective the study aims to answer the following question:

- What benchmarking stages improve the effectiveness of the internal process or impede the effectiveness of the internal process?

### **1.4 Significance of the Study**

As detailed above, benchmarking is considered a strategic planning method that can make a significant difference to an organization's position if it is used properly. This study is designed to identify the role that benchmarking can have in improving the performance and position of the Colleges of Graduate Studies in Palestinian universities. This will be manifested through analyzing the use of benchmarking in planning, implementing, and evaluating master programs accreditations by different universities.

To the best of the researcher's knowledge, this study is the first of its kind that presents and evaluates benchmarking as continuous improvement method that enhances universities' practices. This will be detailed in the case of adopting master degrees by universities.

This research is vital to PHEIs since it contributes to enhance the perception and practices of this modern continuous improvement method, and encourage these universities to implement it.

### **1.5 Thesis Structure**

This section outlines the structure and components of the research:

In the following sections; Chapter 2: this chapter includes literature reviews of any previous work that relates to the subject are under investigation. It helps readers to understand the research's model. The chapter describes the knowledge gap in the field of study and offers insights on how the present study will bridge this gap. After that, Chapter 3: Methodology. This chapter will detail and describes all the methods used throughout this study.

Then, Chapter 4: Results and Discussion. In this chapter, a detailed description of the data analysis procedures and results will be thoroughly described. The main results will be discussed and validated. And lastly chapter 5: Conclusion and recommendations. In this chapter, Major conclusions drawn from the entire study will be formulated.

## **Chapter 2: Literature Review**

### **2.1 Overview**

This chapter defines benchmarking as a strategic planning method from different perspectives. It starts by reviewing what is meant by strategic planning. After that, it presents more details on the definition, objectives, importance, types, and models of benchmarking. Best practices, ethical issues, and obstacles in practicing benchmarking as a strategic planning method, and organizational effectiveness are also presented.

### **2.2 Strategic Planning**

The literature on strategic management has clearly re-defined strategic planning separately and without any kind of confusion with long-term linear planning. Strategic planning can be defined as a method of decision-making that serves the organization's long-term objectives (Steiner, 2010). Moreover, it is a structured approach practiced by organizations to help them reach decisions on critical issues for their survival and long-term vitality and sustainability. These issues serve as the basis for all plans developed for any subsequent period of time.

Strategic planning entails designing a long-term strategy by providing information about the organization's objectives and core directions. For further explanation, strategic planning was also defined as the organization's future vision (Scott, 1965). This planning provides a framework that guides options of the future directions of a particular organization (McCune, 1986). Furthermore, from a performance perspective, strategic planning is defined as a process whereby the organizing members set a vision for the organization's future and develop an action plan necessary to achieve that vision (Pfeiffer et al., 1993). From the perspective of inevitable and continuous change, strategic planning is the process of renewal and organizational transformation. This process provides necessary and

appropriate means to adapt services and activities that help in changing environmental conditions. Peter Drucker's (2011) definition of strategic planning seems to give a comprehensive view of decision-making process starting from the environmental assessment, into goals setting, projects details, and ending with evaluation and follow-up. Drucker considers this process as a set of continuous and organized procedure for making fundamental decisions directly related to the future of the institution, and help to organize efforts and activities needed to achieve these decisions.

Based on the above definitions, strategic planning can be defined as a method and a tool that moves a specific institution into a better position in the future. The institutions adopt these methods and tools to reach their ultimate goals and objectives with the highest degree of efficiency and effectiveness, and with least needed resources.

### **2.3 Rise and Definition of Benchmarking**

Benchmarking has historical associations that date back to 1810 when the industrialist Lowell Francis studied the best methods used in the British flour mills to reach the most successful applications in this field. Consequently, in 1913, Henry Ford used benchmarking to develop the production line by touring the slaughter sites of cows in Chicago (Evans, 1997).

By the end of World War II, Japan was one of the first countries to make extensive benchmarking efforts in the early 1950s. During that stage, the Japanese concentrated their efforts on gathering information, attracting ideas, and simulating American companies during their intense visits. The Japanese used this technique to launch new products and to improve the quality of their products and innovations in the late 1960 and early 1970s, long before benchmarking found its way to the business dictionary (Horngren et al., 2000). Later

on, the application of this approach moved to the United States, where Xerox is counted as the leader of benchmarking. They started to develop and adopt specific benchmarking schemes and techniques to evaluate and improve the performance of organizations in general (Blocher et al., 1999).

The term benchmarking has emerged in response to many variables in contemporary business environments, most significantly the high level of competition and organizations' increasing desire to demonstrate their ability in adapting to the environment and responding to its change as a prerequisite for continued growth and development, (Atraqje,2002).

### **2.3.1 The Concept of Benchmarking**

The concept of benchmarking is relatively a new term in administrative and management studies. According to Meade (2007) benchmarking is a process of searching for special performance practices and sharing information about those practices to meet the needs of the enterprise and implement these practices. It can also be defined as a process of a systematic comparison of own organization with organizations of outstanding performance, for the purpose of creating new approaches and new ideas (Bruderet al.,1994).The European Benchmarking Code of Conduct defined benchmarking as "an organized technique and method of learning from others. It involves observing distinct performance models that may be available within the organization or other organizations that have gained expertise in specific areas of work, and which can be compared in a legal manner." (European Benchmarking Code of Conduct, 2011).

Other researchers like Evan (1997) defined benchmarking in a more specific term. He emphasized the ability to measure the performance of the economic unit in comparison with the best performance by determining the mechanisms by which the economic units

achieve their performance levels. Gained knowledge can be used as a basis for objectives and strategies settings and applications improvement (Evans, 1997). Hilton (1997) recognized benchmarking as a continuous exploration for the most effective ways to accomplish a specific task by comparing the established methods and levels of performance of the economic unit with other units, or other sub-units within the economic unit. These effective ways of accomplishing various tasks are often discovered through referencing and referred to as the best practices.

Hornigren et al. (2000) asserted that benchmarking is a continuous process of measuring products, services, and activities against better performance levels, and they are often found in competing units or other units with nature-like operations.

Blocher et al. (2002) considered benchmarking as the process by which critical success factors in economic units are diagnosed. This diagnosis is often conducted by studying the best applications of other economic units (or subdivisions within the same economic unit) to reach important factors for success, and then implement improvements to unit operations so as to meet the performance of major competitors.

The above-mentioned definitions reflect the view which says that benchmarking is accomplished by comparing economic units within one's company with the most successful or leading units in the sector on a continuous basis to improve performance within the said unit.

Based on the above-mentioned definitions, a definition which is adopted in this study benchmarking is a tool that is used to evaluate and improve the performance of a specific organization by determining the gap in the performance of units, departments, and

workflow in reference to best-practicing organizations to better enhance the organization's position and competitive advantages.

### **2.3.2 Objectives of Benchmarking**

When implemented professionally, benchmarking can lead to the achievement of several objectives. According to Elnathan& Young (1996),the application of benchmarking can achieve three main objectives. First, it helps to achieve continuous improvements in internal processes, by examining how others practice their performance and locate their best practices for simulation and identification of deficiencies to avoid them. Second, a company may seek to implement benchmarking to find new ideas and innovations that may lead to several improvements that help surpass competitors. Third, other companies seek to implement benchmarking to survive in the business environment.

On the other hand, Robert (1999) has identified four objectives for benchmarking. First, it helps help companies to benefit from the experiences of others, especially the best-performing ones. Second, it helps determine how the company's performance commensurate with its capabilities in achieving its objectives using the best ways to do that. Third, it assists the company to be the best through the differentiation of its products and identifying the important needed areas to enhance the competitive advantage of the company, and to make necessary improvements in its products. Lastly, benchmarking results can be used to bypass and minimize any errors or problems in the company.

Based on what is mentioned above, it becomes clear that the application of benchmarking aims at finding a continuous improvement of the company's performance compared with the best competitors and which commensurate with its capabilities.



### **2.3.3 Importance of Benchmarking**

Organizations and units that apply benchmarking can achieve the following benefits (Treadwell et al., 1995).

1. Rationalization of expenditures: Through the implementation of benchmarking, the costs of production and services can be reduced. This is realized through benchmarking since companies can search for other companies that perform the same activity or service at a lower cost.
2. Continuous learning: Through benchmarking, a continuous transfer of expertise and knowledge from other organizations can occur.
3. Benchmarking can provide the organization with an opportunity to move - both internally and externally - towards better models of performance and quality.
4. Improving creative and innovative capabilities of teams responsible for performance improvement. Opportunities expand to include all the organizations involved with them in the benchmarking process.
5. Providing opportunities for cooperation between local organizations and encouraging competition among them to improve performance and introduce new market mechanisms within business strategies.
6. Enabling senior management to answer a range of basic questions such as: Where are we now? Where do we want to be? How do we get to where we want? How do we stay, where we want?
7. Changing the culture of the organization, so that it is directed towards a problem-solving approach, enhancing performance, and concentrating on achieving goals.

### 2.3.4 Types of Benchmarking

Researchers and practitioners have attempted to classify benchmarking into different categories. However, there has not yet been a single classification for benchmarking. Thus, it might be difficult for non-experienced companies to determine the type of benchmarking that gives them the maximum benefit, least cost, and minimum efforts. Following is a description of three benchmarking classifications (Codling, 1992).

- **Internal Benchmarking:** The institution compares between departments within the same organization in the light of certain criteria, and then collects needed information by multiple measuring tools.
- **External Benchmarking:** The institution compares its performance as an institution (or program) with another institution (or with a similar program in another institution) in the light of certain criteria, and the information required is collected by multiple measuring instruments.
- **Best practices benchmarking:** It is practiced by setting standards at a global level and comparing own institution with the best of the industry.

Bogan and English (1994) classified benchmarking techniques differently as follows:

- **Performance benchmarking:** It enables organizations to evaluate and compare their positions with others through product and service comparisons, and by focusing on price, quality, service features, speed, reliability, and other performance characteristics.
- **Process benchmarking:** This type includes a comparison of the common process to all types of institutions, such as commitment to attendance and departure times, work system and wages, the use of modern technologies and other aspects.

- **Strategic Benchmarking:** It examines successful strategies that have led to competitive advantage and academic success; targeting the strengths and weaknesses of the comparator or those engaged in the same activity as an important step to prioritize areas of improvement and identify new ideas contribute that contribute to building a successful strategy.

Yet Boxwell(1994) has differently classified benchmarking as follows;

- **Competitive Benchmarking:** Comparisons between institutions and other competing institutions either locally or globally.
- **Collaborative Benchmarking:** It is conducted by a group of institutions in cooperation among each other's, through exchanging information and performance indicators.
- **Cooperative benchmarking:** conducted between organizations from different sectors.

As explained above, the authors' classifications of benchmarking were based on different perspectives. Codling (1992) classified it based on the referenced partner (internal, external and best-practices). However, Bogan and English (1994) classified it based on the implementation (performance, process, strategy). Lastly, Boxwell (1994), classified benchmarking types based on the relationship between benchmarking parties (competitive, cooperative, and collaborative).

### **2.3.5 Benchmarking Models**

When it comes to the implementation of benchmarking, there is no standard model that is adopted among different organizations. Normally, an organization may use the model that

best fits its environment and resources, (Ross, 1995). There are many different models proposed for benchmarking over the years, however, only a few are widely accepted.

One of the first widely documented and accepted models is Xerox (shown in figure (1)), which was launched in the late 1970s and early 1980s. It is considered a leading model in the area of competitive benchmarking. The company demonstrated the usefulness of monitoring and learning of best practices by benchmarking their competitors. Based on their benchmarking experience, and throughout the knowledge they have gained, they were able to significantly improve their productivity and significantly reduce the cost of their productions. This model is the basis for many late models and considered to be the basic model of benchmarking.

Based on the Xerox experience, Robert Camp (1989) has developed a benchmarking model that can be modified and adapted to suit any functional area. The five sequential stages suggested as parts of (Camp, 1989's) model are described below:

1. **Planning:** According to Kumar (2009), this stage aims to determine what to benchmark and the competitor or the best practitioner to be compared with. The next step, which is one of the most difficult benchmarking steps, is to determine how data will be collected from the competitor. In this stage, the benchmarking team determines the processes that need to be used in the comparison with the best practitioners' processes and decides the methods of gathering the needed data and information for the success of the benchmarking process.
2. **Analysis:** After securing data and information from competitors, they are analyzed to identify the proposed improvements. This step aims to fully understand the details of targeted operations in the organization as well as that of the competitor's. This step helps and leads to determine the gap in the organization.



(Evans, 1997)

Another benchmarking model, which was launched in 1997, is that of Goetsch Davis. As described below this model comprises three stages;

1. **Preparation stage:** It starts with the commitment of top management and ends with the selection of candidates for benchmarking.
1. **Implementation stage:** It starts by agreeing with the partners to implement the required change.
2. **Post-implementation stage:** It is limited to performance control and the updates of the benchmarking process.

Another model is named Jerome P. Finnegan, and comprises four stages;

**Stage 1: Establishing the Study Plan:** The starting point involves documenting all processes within the organization through a streamlined simple flowchart, which helps to identify the weak critical processes on which the benchmarking method should be applied. The appropriate procedures for measuring the current and future performance of these processes are then identified and then followed by the identification of potential comparators who are likely among the leading competitors. The last activity in the first stage is to ensure that senior management supports this study before implementing benchmarking and accepting necessary changes during and post implementation.

**Stage 2: Conducting the Study:** In this stage, the benchmarking team is formed to lead the process. The team preferably includes members who have the ability to translate the results of the study into a practical reality. The team also includes members from departments that will be compared with the partner.

**Stage 3: Analyzing the Data:** At this stage, the partner can be identified for comparison among potential partners. After that, the team will develop a simplified matrix of benchmarks to evaluate the processes that will be compared with that partner.

**Stage 4: Internalizing the Results and Closing the Gap with the Competitors:** The final stage in the comparison process is to implement the plan by transferring the processes and good practices in the partner organization to the organization. After that, implementation is followed up to monitor progress in performance, processes, and practices that have been compared and may require some adjustments to be consistent with new practices which have been implemented.

Based on what is mentioned above, it is clear that benchmarking is a systematic process implemented in stages and systematic steps to ensure that better results are reflected positively on the performance of the company in general. On the other hand, its belief that the procedures associated with the implementation of benchmarking should company the costs of this implementation, like time, effort and the resources spent in this area. Therefore, this requires the company to compare the potential benefits of this application with its costs, and subject to cost-benefit analysis.

The basics of the models are usually very close to each other. Thus, the number of stages and stages is not essential because it depends on the model that is used by the institution. The benchmarking study usually includes the following: determining the subject of benchmarking, collecting data, determining the current gap, predicting future performance, results of communicating with partners, setting goals, developing a plan for the action, and implementing benchmarking.

The three models did not indicate any need for training and preparing the teams that would apply the benchmarking steps, possibly due to the staff experience and knowledge of the benchmarking.

It is worth mentioning that the main responsibility in the implementation of benchmarking stages is mainly the responsibility of the management and the benchmarking teams, which must include the employees in the parts of the organization being compared to ensure the success of the process in all steps.

### **2.3.6 Ethics and Principles of Benchmarking**

Benchmarking should be performed carefully to achieve the common benefit of all parties.

The US Quality House (2002) has developed the following principles of the ethics of the benchmarking:

1. Validity Principle:

This principle avoids any action that may seem to be stealing others' efforts or knowing secrets that others do not wish to disclose, or using the information obtained by the organization to harm others.

2. Confidence Principle:

This means that any information obtained from the partners in the benchmarking process shall not be transferred to another party without the consent of these partners.

3. Interchange Principle:

This principle gives partners in benchmarking process the same amount of information of the same kind and it is best to clarify this willingness to exchange information.

4. Utilizing Principle:



The information obtained from the comparison should not be used in advertising and marketing but should be used only in improving operations.

5. Communication Principle :

You should not directly contact the unit or department that needs to be compared with the organization but this process should be done through responsible managers.

6. Third- Person Communication Principle :

The names of individuals involved in the benchmarking process should not be disclosed either by the organization or partners for any third-party except by obtaining the approval of all parties.

### **2.3.7 Obstacles of Benchmarking Application**

Most of the researches show the existence of obstacles that face the application of benchmarking due to committing some mistakes. According to Yasin (2002), the most common and important obstacles are:

1. Limited support and encouragement of senior management.
2. Conflicts between the comparison program and the survey of partners.
3. The omission of important standards, such as after-sales services and customer satisfaction.
4. Fear of sharing information.
5. Cost of implementing benchmarking.
6. Low level of involvement by concerned staff.
7. Cooperation of senior management in the reference organization.
8. The organization's ability to adopt the procedures of the reference organization.

### **2.3.8 Benchmarking and Competitive Advantages**

Various studies have discussed the subject of competitive advantages and benchmarking.

Researchers of universities confirm that implementing benchmarking as competitive advantages have a significant impact on competitive success.

The relationship between benchmarking and competitiveness is one of the modern trends of management. Moreover, time is the decisive factor in the success of benchmarking, which in turn will reflect a competitive advantage. The speed of development has become a fundamental dimension where the institutions compete. It is also the most important cornerstone that helps companies to achieve uniqueness and creativity. During the application of benchmarking, attention is given to the element of time through the adoption of an accelerated development method. The unit greatly helps to build a competitive advantage through one or more of the four dimensions of competition (cost, quality, time and flexibility), (Ismail, 2007).

### **2.3.9 Benchmarking and Best Practices**

Many researchers have distinguished between benchmarking and best practices. For example, Kumar (2009), has assumed benchmarking as the process that allows the identification of best practices, by recognizing the best performance that improves the performers. However, Sameer (2011) described best practices as processes, practices or systems that produce excellent performance, and works to improve the performance of the organization in every area. Another definition of best practices is the method or manner that is used to accomplish one of the functions of the business or processes, and which are distinct when compared with other methods or known manner. Nevertheless, there are

different types of benchmarking which distinguish the best practice from others. Best practices are not just a new idea, but they need to meet some criteria like:

1. Success over time: Best practices must have a strong track record.
2. Measurable results: The success of best practices must be quantifiable.
3. Innovative: A practice should be recognized by its peers as creative or innovative.
4. Recognized positive outcomes: If the results are quantifiably limited, best practices may be recognized through other positive indicators.
5. Recurrence: Best practices should be replicable with some modifications. They should develop a clear roadmap, describing how the practice has evolved and what benefits are most likely to be attributed to others who rely on the practice.

#### **2.3.10 Benchmarking and Reengineering**

According to Rfaa'e(2006), benchmarking is the process of building operating tasks and productivity programs based on the best applications in the industry. However, re-engineering is the re-designing the fundamental operations, organizational structure, information technology, job content, and workflow to achieve improvements in productivity value. That is, reengineering has a deeper change than the benchmarking.

#### **2.3.11 Benchmarking and Total Quality Management (TQM)**

The philosophy of TQM is based on that customer satisfaction which is achieved through the organization's commitment to the overall quality of its products, processes, and methods. Quality is perceived as providing the consumer with services with specific characteristics that meet his/her requirements, needs and expectations while adapting to the product. This shall be performed through integrated activities that are offered and built by all employees at all levels. It also needs to highlight the strategic role of Quality

Management (QM) in enhancing the ability of the institution to win the competitive advantage that is considered as the most valuable tool in achieving the strategies of cost leadership. As it represents the best way for continuous improvement and cost reduction, this method helps to make the organization a leader in its work (Zahabi, 2001).

QM is an administrative system designed to increase the efficiency of performance and production by developing and improving the processes and the existing system, which consists of inputs, a series of processes and outputs and by using a distinctive scientific method. Many educational institutions in Europe and America have exerted great efforts to transfer this concept from the industrial sector into the education one. The term "total quality in education" refers to the efforts of the educational institution staff who direct resources and processes to raise the level of educational outputs in accordance with the requirements of the community. Additionally, evaluation is an essential part of the overall QM process for education. It is considered as a comprehensive process that includes all aspects of the learning process taking into account the assumptions, determinants, factors, and conditions that play a direct or indirect role in determining the nature and level of practice (Zahabi, 2001).

#### **2.4 Strategic Planning and Benchmarking in Higher Education**

Strategic planning began in universities and other parts of the public sector in the late 1970s and early 1980s after their successful implementation (Rowley et al., 1997). Presley and Leslie (1999), noted that during this period, the planning process in higher education was adopted as an internal form of planning and was best described as "long-term planning". Generally, long-term planning is more guided by strategic planning, which allows flexibility to make unexpected changes and opportunities.

There have been many studies on the subject of strategic planning and benchmarking in higher education, and these studies were able to identify many definitions of those strategy tools. Researchers confirm that strategic planning has a significant impact on the competitive success of universities (Dooris, 2002; Taylor and Miroiu, 2002). Meanwhile, other researchers assumed that in recent years, where information is now available at any time, strategic planning has become significantly important for higher education institutions (Rowely, 2001) and (Sherman, 2004).

In general, the concept of strategic planning for education involves a process of matching the results of evaluating the external environment of an educational institution with the internal environment resources of the institution. This process must be able to help educational institutions to take advantage of strengths and opportunities, and reduce vulnerabilities and threats (McCune, 1986). The concept of strategic planning for higher education is defined as a comprehensive, cross-sectional process for all parts of the institution. The largest possible number of members aims to determine what a university institution should be when it seeks to make good use of its internal strengths and opportunities. In their external environment, they need to work on matching these strengths and opportunities in a way that leads to the best results, (Cope,1981). It can be said that strategic planning of higher education is "the science and art of directing all the forces of the institution of higher education towards the development of strategies and decisions that are essential to determine the institution's future, to develop the necessary plans to achieve the goals and objectives, and to solve the issues and problems that impede reaching the desired results. These definitions reflect the merit of strategic planning as an effective way

of addressing the challenges facing education systems and keeping abreast of the changes that reflect these challenges.

In contrast to being limited to the traditional way of developing internal ideas and goals, benchmarking allows universities to review their organizational functions from an external perspective. It is considered another tool that is used for continuous improvement within higher education institutions. In theory, benchmarking is seen as a systematic way of learning from others and changing what they do (Epper, 1999). Thus, standard setting is defined as "the process of identifying and learning from best practices in other organizations (Campbell & Rozsnyai, 2002). Moreover, the learning process empowering participants to compare their services/activities/products and identify strengths and weaknesses for self-improvement and/or self-organization" (Jackson and Lund, 2000).

By using benchmarking, universities can identify areas where they succeed compared with peer groups. They can also recognize areas that need improvement, and develop strategies that will work better to improve their current circumstances. Burquel and van Vught (2010) suggested that benchmarking is "a strong added-value as a modern instrument and management tool to support leaders in higher education with strategic-decision making based on systematic data gathering for organizational improvement to set targets for increased performance." Alstete (1995) suggested that in the context of promoting of benchmarking, "benchmarking can help overcome resistance to change that can be very strong in conservative organizations, such as colleges and universities, that have had little operational change in many years".

Since universities are characterized as highly complex, highly interrelated organizations, professional bureaucracies, and organized chaos, the adoption of strategic tools and

changes in universities is difficult (Cohen and March 1974; Mintzberg, 1979; Weick, 1976). It is necessary to know how universities interact with their strategic actions and integrate them through strategic tools by investigating strategic planning and standards as strategic tools.

## **2.5 Organizational Effectiveness**

Organizational effectiveness is the relationship between the system's outputs and its planned goals. The more the outputs contribute to the achievement of the goals, the more effective the system will be. Organizational effectiveness is the high and continuous performance to achieve the set goals (Herman & Renz, 1999). It is not easily accessible and the key to performing it is to understand the environment where the organization operates. Based on this understanding, managers will have great success in achieving these organizational effectiveness. On the other hand, if the organization sets a wrong goal, it will go the wrong way and the effectiveness will be at its lowest level. (Salman, 2005).

The concept of organizational effectiveness is difficult to be defined precisely because of the lack of agreement on the nature of efficiency, and the disagreement on the nature of its measurement. Organizational effectiveness can be seen as the final outcome of the organization's performance and its ability to adapt to the external environment (Metwally, 1989). Some have pointed out that the organization's effectiveness is the degree to which the organization achieves its goals (Daft, 2001; Robbins, 1998; Kalleberg & Leichtk, 1991). Others consider the effectiveness as the organization's ability to move centers of power to produce efficiently and adapt to environmental and internal problems (Schreisheim & Eisenbach, 1995; Gun & Holdaway, 1986). The organization's ability to obtain its resources and manage its internal operations in such a way simply enables it to achieve its objectives,

adapt to its external environment, and achieve stakeholders' satisfaction (Rasheed & Mohammad, 2011).

Its believe that organizational effectiveness is the organization's ability to achieve its goals, and required results to be accessed as well as having an effective system of activities, internal processes, and procedures for the work required, and their ability to adapt to environmental changes.

### **2.5.1 Approaches to Measure Organizational Effectiveness**

The complexity of the organizational effectiveness and inability of specialized researchers to develop a unified and comprehensive definition of organizational effectiveness have led to the creation of different perceptions. According to the stages of the historical development of organizational effectiveness, its approaches can be classified as follows:

1. **Goal Approach:** This approach is considered one of the most vital and most widely-used approaches in assessing and measuring effectiveness. It is based on diagnosing the organization's outputs and objectives and assessing its ability to achieve these goals. This approach is logical because each organization seeks to achieve its objectives and a certain level of outputs, (Daft, 2000).

Based on this approach, the organizational effectiveness of the universities institution can be seen as the degree to which the university institution achieves its goals. Therefore, a university can recognize the level of its effectiveness through the successful achievement of its objectives, which are generally focused on three basic issues: education, scientific research and community service.

2. **System Resource Approach:** This approach concentrates on the inputs of studying organizational effectiveness. It is assumed that an organization is effective if it can



obtain the needs of different, scarce and valuable resources from its external environment, and adapt to that environment to achieve effectiveness(Narayanan & Nath,1993). Organizational effectiveness is defined as the organization's capacity to exploit the environment where it operates to obtain scarce and valuable resources,(Ahmad, 2008). This approach focuses on the organization's interaction with its environment and defines organizational effectiveness as the organization's ability to exploit its environment by attracting scarce and valuable resources. Therefore, the organization's effectiveness is fundamentally linked to the extent to which that organization is able to obtain or mobilize the necessary resources to ensure its sustainability and to maintain its survival,(Cameron, 1978).

According to this approach, the validity and effectiveness of the university institution are determined by its ability to attract and utilize the resources derived from the external environment to the best of its ability. Therefore, the level of a university's effectiveness can be identified through its success in collecting the best resources from the external environment which may include the numbers and quality of students, faculty members and their quality, financial support, etc.

3. **Internal Process Approach:** It is based on the measurement of the organizational effectiveness in accordance with internal processes, which are defined as humanitarian operations. The effectiveness is determined by the existence of certain organizational characteristics, such as flexibility, organizational health, leadership and communication, group behavior and level of conflict. It is also determined by its concentration on the internal mechanisms of the organization information flows (Hilwa, 1982). This approach evaluates effectiveness through management

processes within the organization rather than focusing on results or endings (Cameron, 1978).

4. **Constituency Approach:** This approach takes into account the desires and objectives of the stakeholders(owners, consumers, human resources, government, and civil society); however, the problem is the conflict of different interests, which makes measuring the effectiveness a difficult task. According to Miles and Keely (1977), effectiveness is the ability of an organization to meet the needs and requirements of organizational members and other strategic groups benefiting from the organization. Top management is able to formulate goals that meet the interests of these groups and achieve a balance of interests and better performance (Dulaimi, 1994). To a large extent, organizational effectiveness depends on the organization's ability to respond and meet the demands and expectations of its members and strategic segments to a satisfactory degree. The organization's strategic segments are usually in the relevant categories of the organization, such as owners group and a consumer group. Thus, their satisfaction represents the entrance to the measurement of any organization (Fadhli, 1995).

Therefore, the organizational effectiveness of the university can be seen as the extent to which the university can satisfy its members' demands and expectations, it's public and its strategic segments at a satisfactory degree. Thus, any university can identify the level of its effectiveness by measuring its success in satisfying its members' demands and expectations, the public and its strategic segments to a satisfactory degree. These members and strategic segments are represented by students, faculty members, administrators, the general staff, the different community institutions, and the general public.

This approach is linked to the interaction process between individuals and groups and the pursuit of various objectives. It also focuses on the concept of competition among several values and objectives to be highlighted in the form of priorities. The basic principle of this approach is the criterion used to measure the organizationaleffectiveness, which means the desires or values favored by workers or managers in the organization. As a result, it has been found out that organizational effectiveness is a personal subject that is linked to the personal values of the individual evaluator, preferences, and desires. It may be found that the owner of the organization has assessed the effectiveness of a manner different from the assessment provided by the accounting manager or marketing or Human Resources, (Al-Salem, 2008).

Based on the previous description of the most important approaches for measuring organizational effectiveness, it is now clear that:

- The diversity of the approaches and methods that are used to study effectiveness is a positive natural phenomenon consistent with the nature of the concept of effectiveness.
- All these approaches search for the optimal way to achieve greater success for the institution.
- Each of these approaches tries to focus on the most prominent organizational characteristics of the institutions.
- Each of these entries has different criteria for judging the effectiveness of the organization.
- All of these approaches have advantages and drawbacks, which make us judge that there is no entry that can address all aspects and organizational dimensions alone.

## **2.6 Benchmarking and Organization Effectiveness**

Using and depending on benchmarking in the institution to improve performance has become the way of the major international institutions because it plays a critical role, especially with the huge technological development and progress in the field of competition. The institution's performance has become the goal that all institutions seek to upgrade and develop, (Zairi, 1996). Therefore, the use of benchmarking to improve performance gives the institution many advantages, both internally and externally (David, 2011):

1. It provides appropriate knowledge and information to the right person at the right time.
2. The external focus of benchmarking directs all efforts of improvement towards the best to satisfy everyone.
3. External benchmarking has external competitive performance benchmarks that necessarily increase the efficiency and effectiveness of internal performance making them more competitive
4. The use of benchmarking helps to reduce costs resulting from misjudgment or implementation.
5. Benchmarking helps the organization to adapt quickly to the latest developments in the environment.

Benchmarking with competitors enables the organization to identify the rate at which competitors move towards improvement, development, knowledge acquisition and creativity. If this rate is lower than the rates of competitors, this is a harbinger of danger. Some also argue that benchmarking is the most important and powerful method which can

be used by existing institutions to measure and improve their performance. Studies indicate that benchmarking help institutions obtain 82% of the information. In addition to other aspects, such as knowledge of the levels of competition and effectiveness in achieving the goals. A US study of 150 medium and large-sized institutions proved that these institutions have conducted a benchmarking with leading institutions in the field. The most important results are those that helped institutions to improve their performance in different areas by 90%. As can be noted, the improvement was not limited to economic performance, but also social and environmental performance. This confirms the important role of benchmarking in improving the institution's performance, (Franck, 2009).

Organizational effectiveness has become the goal that all institutions seek to upgrade and develop. Therefore, the use of benchmarking in improving performance and achieving objectives gives the institution many advantages both internally and externally, including:

- Benchmarking provides the right knowledge and information for the right person at the right time. Malhoter(2010) says that this idea can be applied to modern information systems that reflect the concept that says business will increasingly change in a self-sustaining market.

- The external focus on benchmarking directs all the improvement efforts in the company towards the introducing and achieving goals quickly, in the best quality, and with least expenses to satisfy the customer. Moreover, these are the factors of success for the company since they help achieve the goals at the lowest costs possible.

- The external focus on benchmarking found external competitive performance measures that necessarily increase the efficiency and effectiveness of internal performance metrics, and make them more competitive,(Ali et al, 2017).

-Benchmarking helps the organization to adapt quickly to the latest developments in the environment, and the speed of correcting errors, i.e., feedback; ideas and new ways of production and management. This is conducted by contacting the partner that needs to be compared with. It can take advantage of successful and failed experiences to identify errors and correct them.

**Based on that, it has been identified the importance of measuring the organizational effectiveness of universities is as follows:**

- It is useful to determine and solve the problems by specifying strengths, weaknesses, and imbalances in the university. After that, they are used to develop and reinforce strengths on the one hand and work to address the weaknesses and imbalances on the other.
- It provides the university's managers and management with the necessary information to make important strategic decisions, whether for development or in the case when fundamental changes occur. Thus, measuring the effectiveness of the university means providing one of the most important conditions for the development of the university.
- The measurement of effectiveness is one of the most important sources of data and information necessary to make strategic decisions, and the formulation of public policies whether on the university/universities level of the state level.

## **2.7Previous Studies**

Nowadays, benchmarking is considered one of the most important management tools when it is used correctly. Using benchmarking contributes to the improvement of performance indicators and helps identify strengths. It is also important to assess and develop the performance of the organization and enables it to benefit from other distinguished

institutions. As a result, this will encourage any organization to higher levels and recognizes methods used to achieve this, (Saleh and Nour, 2013).

According to Sa'ad (2012), benchmarking is a modern management tool that has proven its success in the application through constant comparisons of products or services with the best competitive performance levels. It also helps to improve their performance and gives organizations a competitive advantage to face the competitors.

(Burquel,2010) found out benchmarking as a modern management tool that helps to set targets for increased performance through inter-organizational learning. Additionally, benchmarking has been successful not only in assisting departments and programs in developing mission and vision statements, organizational goals, and action plans, but also in disseminating organizational information, promoting participation, incorporating new members, and increasing awareness of strengths and opportunities for improvement,(Immordino, etal.,2016).

Today's educational institutions are characterized by their complexity, multi-functionality, and goals. The greater the number of functions in the university education, the greater the number of planning and strategies. In order to make a successful university strategic planning that develops university education and achieves its objectives, it needs an introduction to the availability of the latest information about the distinguished universities, and the availability of multiple alternatives that can be made by benchmarking, (Hasan, 2016).

The results of the studies carried out in developed countries show that using benchmarking techniques prompts learners to make conscious and intentional choices that align with and reinforce their overall future vision and that this enhances their sense of purpose and

identity, (Chance, & Williams, 2009). Therefore, Hasan (2016), assumes benchmarking works to collect data and information on scientific and ethical basis to identify successful experiences. Thus, this helps provide multiple alternatives to support the university's strategies, decision-making, the development of the institutional reality, and the direction of the university towards a better future. Therefore, benchmarking in the higher education system is a method that searches for the best practices that aim to achieve the best results through learning from the other two by using their expertise and collaborating with them, (Wozniacki, et al., 2013).

Consequently, Sarialtin (2015), found that benchmarking at HEI helps overcome resistance to change, provides a structure for external evaluation, and creates new networks of communication between institutions where valuable information and experiences can be shared.

Lutfullayev (2007), has found that benchmarking is a tool that supports strategic decisions at modern administrations. It also provides guidance to the departments for aggregate planning to improve their efficiency, (Rayeni, & Saljooghi, 2013)

The results of the Haris' (2012) study indicate that information availability is one of the factors that have a significant contribution to benchmarking and strategies, where the percentage of information variable reached 73.30%.

International studies found out that benchmarking can improve academic excellence and accomplish competitive advantages. (Tasopoulou, & Tsiotras, 2017).

Plaček et al., (2015) demonstrated that benchmarking is not utilized ordinarily these days. If used properly, higher education can accomplish a high level through benchmarking. In a study by Abbas, (2014) stated that benchmarking is being utilized by most organizations;



however, the best practice is limited. Odora(2014) shows that university personnelis aware of benchmarking but it isn't comprehensively used. On a dynamic side, the study reveals that benchmarking achieve improvement for higher education and achieves an organizational transformation strategy in Higher Education organizations in South Africa. Elmuti(1998) stated that there is a positive correlation between benchmarking and organizational effectiveness; benchmarking can be considered as a great instrument to achieve competitiveness.

On the other hand, the researchers in developing countries like, (Uchechi,2001) have found that benchmarking is a possible mean of development and can lead to innovative university management in the future. Besides that, Magutu (2011) found that the major internal trigger of change is the actual performance.

In the Arab region, and after reviewing previous studies related to benchmarking, it has been noted the limited number of Arab studies of the topic compared with foreign studies, despite its importance as an administrative tool. Al-Tarawneh's(2014) study outcomes show that benchmarking is a powerful managerial instrument to help administrators in drafting policies. Likewise, the outcomes demonstrate that benchmarking is broad among Jordanian banks and gives an advanced guide to more future utilization.

The results of Magd's(2008) study demonstrated that the most important reasons for introducing benchmarking are the accomplishment of competitive advantage, productivity, and continuous improvement. Moreover, customer's satisfaction and better response time are the most advantages related to benchmarking implementation.

Arabic studies have shown the absence of empirical research in the fields of benchmarking, and a lack in the availability of data for the development of benchmarks which will be fully

measured as in the study of (Nassar, 2012). Some studies called for the use of benchmarking as an improvement and continuous development tool that would lead to the re-organizing and re-structuring the organization as in Ismail(2008).

Hasan, (2016), asserted that benchmarking works to collect data and information on a scientific and ethical basis, and it works to identify successful experiences. Thus, providing multiple alternatives supports university's strategies, decision-making, the development of the institutional reality, and the direction of the university towards a better future.

Ahmad & Majeed(2007) stated that benchmarking is a continuous systematic process of learning, comparing, and implementing best practices that improve performance. Benchmarking in Higher Education is a means of enhancing quality assurance and a tool for increasing the effectiveness of university administration. Likewise, Qumber (2016) found that benchmarking should be used continuously to evaluate performance and identify the level of performance to benefit from the results, in addition to adopting strategic planning as a method of planning to raise the level of performance. Moreover, Musher (2016), found that the correct use of benchmarking contributes to the improvement of performance indicators and the identification of power elements within university libraries. Similarly, performance indicators and benchmarking are powerful tools in supporting programs and educational institutions to organize their ability and develop all internal processes so they are highly effective at the top. Consequently, Al-Medlej(2007) suggested the adoption of an approach that would lead to more effective decision-making in HEI. Accordingly, there is also a strong emphasis on benchmarking as a tool that improves the performance of HEIs in the Arab region. Nonetheless, benchmarking is a new concept for

most HEIs in this region; this gives them an opportunity to learn from the experience of other nations by examining the different tools used in benchmarking, (Al-Khalifa,2015).

Albatta (2015), emphasized the importance of applying benchmarking to achieving excellence competitive for operating banks in the Gaza strip of the companies. Also, Mutaire (2011) found the same result in commercial Kuwaiti banks.

As for the foreign studies, they have dealt with the subject in details and with more practical aspects. They have contributed to finding unconventional standard models as in Mehregan, et al., (2010) study. Other studies have observed some organizational barriers which limited implementation of benchmarking in organizations was noted in Balzan&Acchino (2007) study. Some other studies, such as that of Björklund (2010), emphasized the importance of applying benchmarking improving the social responsibility of the companies.

Unfortunately, the literature that directly addresses benchmarking in Palestine is missing specifically in HEIs, which is one of the motivators for carrying out this study. Up until the present moment, it is not known to what extent benchmarking is applied in master programs in Palestinian universities. This study concentrates on a new concept which is benchmarking, that still being addressed internationally in its beginnings; however, attention for that is still growing. The study is applied in universities in the West Bank. Additionally, it focuses on all large universities, the matter which makes it easier to generalize the results.

The study benefits different types of organizations since continuous improvement is the most important process in any organization. The concept has been applied recently on HEIs. The present study may contribute by highlighting the direct relationship between

benchmarking and organizational effectiveness. In addition, it might provide good information that shows to which extent Palestinian universities are ready to follow other international universities which in turn reflect their readiness to compete with the international universities. These are the most important motivations for this study.

### **2.8 Formulated Hypotheses:**

This section is intended to formulate the main hypotheses that the study examines in view of the motivations listed above and the state of literature the researcher managed to collect. It is essential to point out at this point that the collected data for this study were collected in view of these hypotheses. The different hypotheses are divided into the subsections as detailed below:

1. H0: There is no significant difference at ( $\alpha \leq 0.05$ ) between join and non-joint programs with respect to internal process effectiveness.
2. H0: There is no significant difference in internal process effectiveness at ( $\alpha \leq 0.05$ ) between universities that benchmark program with local, regional and international universities.
3. H0: There is no significant difference at ( $\alpha \leq 0.05$ ) between internal process effectiveness with respect to university type.
4. H0: There is no significant difference at ( $\alpha \leq 0.05$ ) between benchmarking obstacles with respect to university type.
5. H0: There is no significant difference at ( $\alpha \leq 0.05$ ) between universities which compare practices (international, local, Regional, and all the previous type ) with respect to perceived benchmarking obstacles.

6. H0: There is no significant difference at ( $\alpha \leq 0.05$ ) between the employed areas of benchmarking with respect to perceived obstacles.
7. H0: There is no significant difference at ( $\alpha \leq 0.05$ ) between joint and non-joint program with another university with respect to perceived obstacles.
8. H0: There is no significant difference at ( $\alpha \leq 0.05$ ) between Master programs with-without a strategic plan with respect to perceived obstacles.
9. H0: There is no significant association at ( $\alpha \leq 0.05$ ) between benchmarking obstacles with respect to program age and number of years as a program director.

To achieve the objective of this study the researcher proposed a model for the study in which the independent variable is the implementation of the benchmarking stages (Planning, Analysis, Integration, Action, and Maturity) and other demographic variables, the dependent variable is the (effectiveness of the internal process). Figure (2) shows the proposed model.

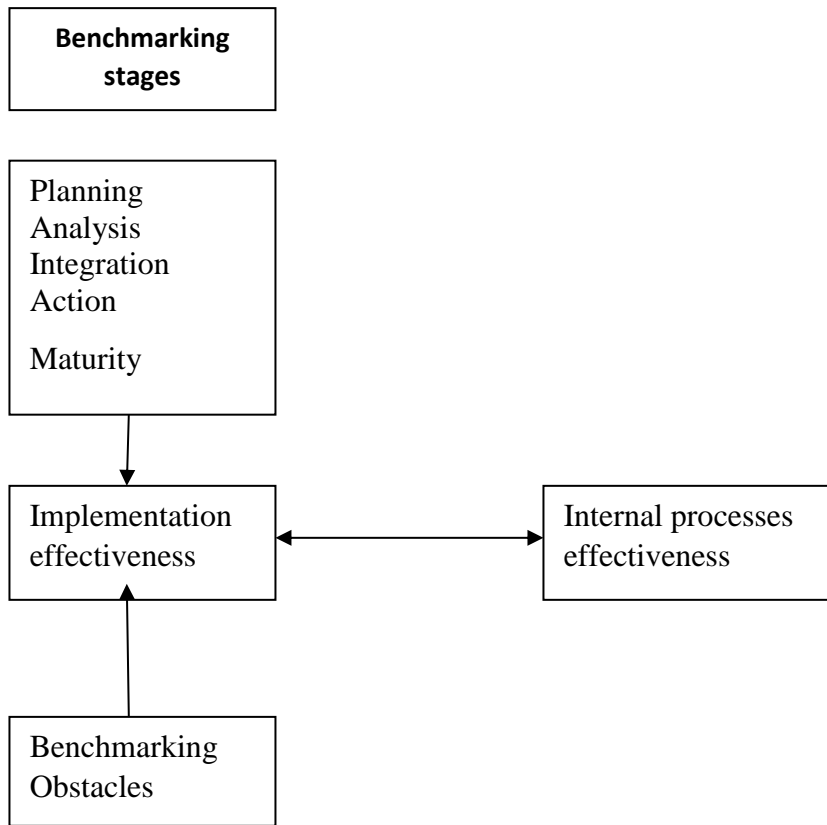


Figure 2: A Proposed Framework For The Study

## **Chapter 3: Methodology**

### **3.1 Overview**

This chapter describes the methodology used in this research. The research depended on the descriptive analysis methodology so as to answer the research objectives. It describes the research population represented by the Palestinian universities in the West Bank and the research sample which was represented by the master program directors. It also reviews the selection of the research tool and how it was built, the amendments made and procedures used to verify the validity and consistency of the questionnaire. The study has also dealt with various statistical methods and tests used in the treatment of data.

### **3.2 Research Approach**

Based on the nature of the research and its objectives, which aims to address to which extent Palestinian universities implement benchmarking in the master program. In reference to the literature review, it was noted that the descriptive approach is more appropriate when it comes to the theoretical framework. The study also aims to explore the opportunities for performance improvement and how the obstacles of implementing benchmarking method affect the effectiveness of the internal process. It seeks to analyze these data and interpret them to achieve the results and try to link some variables together and explain clearly. Therefore, this goes beyond the description of the analysis and interpretation so as to conclude with certain recommendations. Hence, the study adopted the analytical descriptive method based on the diagnosis of the existing situation and testing of hypotheses using appropriate statistical tests to access indicators' value that supports the subject of research.

### 3.3 Research Design

After investigating the literature on the use of benchmarking, it was searched for literature related to the use of benchmarking among masters programs. However, there were very few resources that discuss the subject matter. It has been chosen to conduct a questionnaire to understand the extent to which benchmarking is applied in master programs in College of Graduate Studies in Palestinian universities in the West Bank, in addition, to explore the opportunities for performance improvement and how the obstacles of implementing benchmarking method affect the effectiveness of the internal process.

### 3.4 Variables

Table (3.1) lists the dependent and independent variables used in the model of the study.

Some of them are latent variable and the other is a demographic variable.

**Table (3.1):Description of variables in the model**

Variable	Description	Type of variable
<b>Planning (PA)</b>	This stage aims at determining the competitor or the best performance to be compared with it. After that, it will specify the method by which the data will be collected from the competitor. This stage is one of the most difficult of benchmarking stages, the benchmarking team will be formed to determine the comparable processes to select the comparative partner, determine the type and methods of gathering the necessary information for the success of the benchmarking process.	Independent
<b>Analysis (AN)</b>	After planning, collecting information and data about the operations of benchmarking partners, the next step is to analyze the raw data to identify proposed improvements. This step aims to fully understand the organization's current operations as well as the partner's operations in comparison. Then, it determines the gap in the organization, and what factors exceed the partner in the operations occupied by the comparison and then	Independent



	deduce future performance levels.	
<b>Integration (IN)</b>	Based on what was reached in the planning and analysis steps, the activities and the targeted processes that needed to be implemented are identified at this stage. Therefore, the organization should ensure that the concepts of benchmarking are implemented in the planning process and that the benchmarking is acceptable and convincing at all administrative levels. At this stage, resources and capabilities are identified for the success of the comparison process which would lead to achieving the best performance levels towards excellence performance.	Independent
<b>Action (AC)</b>	The actual implementation begins with the translation of the planning, analysis and integration steps into actions and procedures. The most important steps are the modification, development, and application of the best methods acquired by the partner, in a manner that is appropriate to the organization's environment, besides monitoring the results and the level of progress achieved.	Independent
<b>Maturity (MA)</b>	This is achieved when the best methods that have been transferred from the partner to the organization appear, resulting in the treatment of the negative gap, and leading to the best performance of the organization as a whole.	Independent
<b>University Strategic Plan (SUplan)</b>	The document that summarizes how the objectives of the university can be achieved. The plans include resource allocation, timetables, and any other actions needed to achieve these objectives,	Independent
<b>Program Strategic Plan (Splan)</b>	The document that summarizes how the objectives of the master program can be achieved. The plans include resource allocation, timetables, and any other actions needed to achieve these objectives,  Represent if the program has a strategic plan. Dummy variable: Yes=1, No=0.	Independent
<b>No. Students who register</b>	A number of master students who register the program each year.	Independent

<b>yearly (Nstudent)</b>		
<b>The effectiveness of Internal Process</b>	Effectiveness is the ability to excel in internal efficiency, coordination, motivation, and employee satisfaction.	Dependent

Table (3.2) lists the dependent and independent variables used in testing the hypotheses of the study. Some of them are latent variable and the other is demographic variable.

**Table (3.2):Hypothesis Testing**

<b>Variable</b>	<b>Description</b>	<b>Type of variable</b>
<b>Benchmarking Obstacles</b>	Challenges facing the university during the benchmarking application	Dependent
<b>The effectiveness of Internal Process</b>	Effectiveness is the ability to excel in internal efficiency, coordination, motivation, and employee satisfaction.	Dependent
<b>Joint Program (jprogram)</b>	Two or more universities are involved in delivering an academic program for students.  Represent if the program is joint with another university. Dummy variable: Yes=1, No=0.	Independent
<b>Universities that compare their programs with other universities</b>	<ul style="list-style-type: none"> <li>• Local Universities=1</li> <li>• Regional Universities =2</li> <li>•International Universities=3</li> <li>• All of the above=4</li> <li>• Does not compare its Master Programs=5</li> </ul>	Independent
<b>University type</b>	Public=1, Private=2 and governmental=3.	Independent
<b>Areas of benchmarking Implementation</b>	<ul style="list-style-type: none"> <li>•Modification of study plans Yes=1, No=0.</li> <li>•Adoption of new teaching methods Yes=1, No=0.</li> <li>•The strategic plan Yes=1, No=0.</li> <li>•Services offered to Master students Yes=1, No=0.</li> <li>•Master graduates and labor market Yes=1, No=0.</li> <li>• Evaluation techniques Yes=1, No=0.</li> <li>• Scientific Research Yes=1, No=0.</li> </ul>	Independent
<b>Program</b>	The document summarizes how the objectives can be	Independent

<b>Strategic Plan (Splan)</b>	achieved. The plans include resource allocation, timetables, and any other actions needed to achieve these objectives,  Represent if the program has a strategic plan. Dummy variable: Yes=1, No=0.	
<b>Number of years as a program director</b>	Years of work as a master director.	Independent
<b>Program Age</b>	Age of program from its beginning up until now.	Independent

### 3.5 Data Collection and Analysis Procedures

Data collection took place between 16<sup>th</sup>May and 16<sup>th</sup>June 2018. The questionnaires were personally distributed to the directors of the master programs at each Palestinian universities that offer a master program. The first step was to choose the suitable sample that represents the population, and this was conducted by choosing the stratified sample through consulting the Ministry of Higher Education (MOHE) to identify the number of the master program in each Palestinian university. Upon designing the questionnaire, it was reviewed and modified by the research supervisor. Additionally, content validity was conducted by sending the modified copy with covering letter to three academic experts to evaluate the content validity of the questionnaire, check readability, check if the questionnaire is free of typos and grammar mistakes, and to add more factors and information if needed based on the pilot phase findings. Finally, it was permitted to distribute the questionnaire after making minor modifications needed.

**Table (3.3): Population characteristic**

The Population characteristic from Palestinian universities as follows;

<b>University</b>	<b>Number of themaster program</b>	<b>Percent %</b>
<b>Al-Najah National University</b>	53	32.92
<b>The Arab American University</b>	11	6.83
<b>Bethlehem University</b>	4	2.48
<b>Birzeit University</b>	33	20.50
<b>Hebron University</b>	11	6.83
<b>Palestine Polytechnic University</b>	6	3.73
<b>Al-Quds University</b>	39	24.22
<b>Al-Quds Open University</b>	3	1.86
<b>Palestine Technical University – Khadoore</b>	1	0.63
<b>Total</b>	161	100

In this study, to examine the hypotheses and questions, it was used some statistical tools as follows:

- Frequencies and percentage to describe the sample's characteristics and responses.
- Cronbach's Alpha, Guttman split-half and composite reliability to estimate the reliability of the questionnaire dimensions.
- Parson Correlation to assess content validity.
- Normality test to examine if the variable has the normal distribution or not, by Kolmogorov-Smirnov test of Normality, Z-value of kurtosis and skewness.

- Mann-Whitney U Test to examine the differences of variables that consist of two groups, the higher U value the lower the overlap between groups. And as p-value is less than 0.05 the null hypothesis is rejected because there is a difference between groups.
- Kruskal Wallis test is the non-parametric alternative of variance test (one way-ANOVA), which is appropriate when there is a need to compare between data that have more than two groups to determine if there is a significant difference between the tested groups or not.
- Multiple Regression was used to build benchmarking models.

### **3.6 Sample Technique Respondents**

In this study, all universities have been contacted so as to receive a list of the master programs and the names the directors of these programs. The results of the data collected from the universities showed that there are 9 universities which have master programs that represent the studied population. The efficient way to choose the sample that represents the population is a proportional stratified sampling because universities don't have the same number of master programs. Accordingly, the researcher divided the population into 9 groups, each group represents one university. After that, the questionnaires were randomly distributed to a sample of 50 Programs' Heads selected in these universities. Table (3.4) represent the sample distributed:

**Table (3.4): Sample Distribution According to University**

<b>University</b>	<b>Number of the master program</b>	<b>Percent %</b>
<b>An-Najah National University</b>	17	32.92
<b>Arab American University</b>	3	6.83
<b>Bethlehem University</b>	1	2.48
<b>Birzeit University</b>	10	20.50
<b>Hebron University</b>	3	6.83
<b>Palestine Polytechnic University</b>	2	3.73
<b>Al-Quds University</b>	12	24.22
<b>Al-Quds Open University</b>	1	1.86
<b>Palestine Technical University – Khadoore</b>	1	0.63
<b>Total</b>	50	100

**3.7 Questionnaire Design:**

The questionnaire was carefully designed to facilitate collecting the data and to maximize the reliability and validity of data gathered from the respondents. The questionnaire was prepared in Arabic as it gives respondents the opportunity to better understand the concept. The questionnaire included four parts as follows: the first part consisted of demographic information about the master program (Age of the program since its establishment, number of students per year, the university's strategic plan, the Master's program strategic plan, the university partnership of this program with another university, type of university, number of students annually graduated, the university with which the master programs are compared, the implementation of benchmarking and whether it has opened new master's

programs in the university, and finally areas in which benchmarking is used). Part two: "benchmarking component" consisted of five stages of benchmarking as independent variables. The first stage was "planning" and it consisted of 6 items. These six items were used by (Beheshti et al.,2006) like; the program's director appropriately plans benchmarking procedures,the director considers the best practices to conduct benchmarking and the director follows up leading universities to take them as references. The second stage "analysis" consisted of four items which were used by (Kurz& Haring, 2005) like; the director carefully follows all processes taking place in the master's programs in other universities to make improvements, the director avoids gaps by conducting benchmarking when necessary, and the director resorts to external experts to analyze processes at the University . While the third stage "integrations" was used by the(Qiao& Liu, 2004), and consisted of six items like;The director follows and benefits from processes that take place in the distinguished universities and the director has a clear understanding of processes taking place in distinguished universities. The fourth stage "action" that included five items and was used by (McGaughey&Ronald, 2002)like; Measures are taken to ensure the success of the change during implementation. And the director has the skills to adopt the best methods to make a difference. The last stage was, "Maturity" that consisted of four items and was used by (Bhatt, Emdad, Roberts and Grover,2009).Like; the director recognizes the importance of competition with other universities.

Part three "Effectiveness of Internal Processes for the College of Graduate Studies" consisted of 4 items and was used by(Qasem & Ahmad,2011);(Omer at el.,2016);(Jasem & Rasheed,2011);(Hannounah,2006);(Renz & Herman,2004).Finally, Part four

"Benchmarking Obstacles" consisted of our items. Appendix (1) shows the questions that were used throughout this study. Questions included in the questionnaire were proposed in the form of a statement, and the respondent rated level of their argument using a seven-point Likert scale of positive statement rating scale ranging from seven (strongly agree) to one (strongly disagree).

### **3.8 Data Editing and Encoding**

The SPSS program was used to analyze the data after being entered on the computer, by taking and encoding all fifty-three variables. The questionnaire used to collect data consisted of three sections. Before performing the fundamental analysis, it is important to decide on the checklist for screening the data and find out the effect that the characteristics of the data may have on the results.

### **3.9 Missing Data**

The first step in the data screening process is to identify the missing data. In this study, the proportional stratified sample used which consisted of fifty directors of the master program at the Palestinian universities. All directors answered all items in the questionnaire; therefore, no missing data appears in the study.

### **3.10 Treatment of Outlier (Mahalanobis Distance)**

The treatment of outliers is another important issue in the data screening process. The criterion for identification of multivariate outliers is the Mahalanobis Distance at  $p < 0.001$ . Distance is evaluated at degrees of freedom of 32 which is the number of variables in this study. Any case of Mahalanobis Distance greater than 62.487, which is the critical chi-square at the degree of freedom 32 and significance level of 0.001, is considered as a



multivariate outlier and therefore is deleted from the data set. In this study, Mahalanobis Distance doesn't define any case as multivariate outliers.

### **3.11 Assessment of Normality**

In most of the analysis, the data should follow a normal distribution, this subsection checks on the normality of variables. Table (3.5) displays the normality test, represented by the Z-value of kurtosis and skewness, which don't show any significant value that exceeds 0.05. In Table (4.1), the skewness measures the asymmetry of the distribution of variables, while the kurtosis is a measure for the peakedness of distribution, whereas the:

$$Z \text{ skewness} = \text{skewness stat} / \text{std. error}$$

$$Z \text{ kurtosis} = \text{kurtosis stat} / \text{std. error}$$

The reference of substantial departure from normality for absolute Z-value of skewness and kurtosis is less than 1.96. In Table(3.5), the Z-value is less than 1.96 for all variables, therefore, all variables do not have a normal distribution except the internal process effectiveness and benchmarking obstacles., Kolmogorov-Smirnov confirms that all variables do not have a normal distribution since all p-value is less than 0.05. The researcher must use a nonparametric test for the data statistical analysis. For further confirmation and validity, the research has conducted another test to emphasize that data are not normality distribution. The reason behind these result may refer to the small sample size the researcher has dealt with.

**Table(3.5): Normality Test:**

Construct	Skew. Stat	Std.Error of Skew	Z-value	Kurtosis. Stat.	Std.Error of Kurtosis	Z-value	Kolmogorov-Smirnov		
							Statistic	df	Sig.
<b>Planning</b>	-3.411	.337	-10.135	15.177	.662	22.930	.286	50	.000
<b>Analysis</b>	-1.404	.337	-4.170	3.002	.662	4.536	.197	50	.000
<b>Integration</b>	-2.431	.337	-7.221	9.215	.662	13.922	.186	50	.000
<b>Action</b>	-3.205	.337	-9.522	13.394	.662	20.235	.248	50	.000
<b>Maturity</b>	-2.401	.337	-7.132	7.018	.662	10.603	.212	50	.000
<b>Effectiveness of Internal process</b>	-.279	.337	-.830	-1.463	.662	-2.211	.283	50	.000
<b>Benchmarking Obstacles</b>	-.410	.337	-1.218	-1.325	.662	-2.002	.232	50	.000

### 3.12 Factor Analysis

Two significant values have been considered to conclude if the researcher applies the factor analysis technique on this data. One is Kaiser-Meyer-Olkin value which determines the suitability of the data sample for factor analysis, and the other is commonalities that demonstrate the amount of variance accounted in the extracted factors as a result of all factors included in the lateral variable or construct. In both sections, the factor analysis of benchmarking and effectiveness of internal process at the College of Graduate Studies display.

#### 3.12.1 Factor Analysis of Benchmarking Variables

KMO and Bartlett tests were applied to determine the suitability of the data. The result of KMO analysis shown in Table3.6 is 0.836, which is more than 0.60, which indicates that the indicators used to measure the benchmarking construct are appropriate. This is also confirmed

by Bartlett's test of significant shown in Table(3.6), which shows a p-value=0.000 less than 0.05. Hence, the assumption of the factor analysis was applicable.

Table( 3.6): KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.836
Bartlett's Test of Sphericity	Approx. Chi-Square	1724.042
	Df	300
	Sig.	.000
Variance		85.258

Table(3.7)presents the result of factor analysis in five steps with an eigenvalue larger than one and which explains 85.258 percent of variance cumulatively. Factor 1, which represents the benchmarking "Action" construct, consists of 5 items, with factor loading >0.50 was selected, which explains 20.934 percent of the variance. Factor 2 represents the "Maturity" construct, which explains 17.889 percent of the variance. Factor 3 represents "Planning" construct, which consists of 6 items and explains 16.237 percent of the variance, and factor 4 represents "integration" construct, which consists of 6 items and explains 16.125 percent of the variance. Finally factors 5 consists of 4 items that represent the "Analysis" construct and explains 14.027 percent of the variance.

**Table(3.7): Structure of Factor Analysis**

Items	Commonalities	Factor 1 Action	Factor 3 Maturity	Factor 4 Planning	Factor 5 Integration	Factor 6 Analysis
AC3	.882	.885				
AC4	.922	.792				
AC2	.889	.761				
AC5	.788	.731				
AC1	.830	.669				
MA1	.910		.849			
MA2	.828		.801			
MA3	.813		.794			
MA4	.829		.657			
PL6	.859			.822		
PL3	.770			.767		
PL2	.917			.663		
PL1	.869			.643		
PL5	.859			.619		
PL4	.870			.553		
IN4	.878				.753	
IN5	.884				.718	
IN3	.827				.680	
IN1	.793				.669	
IN6	.829				.664	
IN2	.912				.655	
NA1	.949					.886
AN2	.933					.878
AN4	.810					.634
AN3	.666					.523
<b>Eigen value</b>		14.972	2.242	1.556	1.326	1.218

It is important to mention that the extraction method used is the Principal Component Analysis, while the Rotation Method is the Varimax with Kaiser Normalization, and the rotation converged after 13 iterations.

### 3.12.2 Factor Analysis of the Effectiveness of Internal process and Benchmarking Obstacles variables

Kaiser-Meyer-Olkin and Bartlett tests were applied to determine the suitability of the data for this part. The KMO measure as shown in Table(3.8) is 0.702 which is more than 0.60, which indicates the suitability of the indicators to measure the variables. This is again confirmed by Bartlett's test with a p-value of 0.000, which is less than 0.05 and is considered significant, so the assumption of the factor analysis was applicable.

**Table( 3.8): KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.702
Bartlett's Test of Sphericity	Approx. Chi-Square	85.274
	Df	21
	Sig.	.000
Variance	60.401	

Table (3.9) shows the result of factor analysis for the effectiveness of the internal process with eigenvalue being more than one and explains 60.4 percent of variance cumulatively. Factor 1, which presents the obstacles, consists of 3 items, one of which was deleted because of low loading on the corresponding construct, while all other factors with loading were  $>0.50$  were selected and explained 33.0 percent of the variance. Factor 2 represents the effectiveness of internal process which consists of 4 items, one of which was deleted because of low loading on the corresponding construct, while all other factors with loading  $>0.50$  represented the construct and explained 27.4 percent of the variance.

**Table(3.9):Structure of Factor Analysis**

<b>Items</b>	<b>Communities</b>	<b>Factor 1 Benchmarking Obstacles</b>	<b>Factor 2 Internal process effectiveness</b>
O2	.713	.843	
O3	.657	.735	
O1	.544	.721	
O4	.551	.606	
	-		
EFF2	.663		.798
EFF1	.595		.746
EFF3	.505		.631
	-		
<b>Eigenvalue</b>		2.781	1.447

### 3.13 Reliability Analysis

To check the reliability of the data, the researcher utilized Cronbach's Alpha and Guttman split-half statistical tools. The reliability tools are considered as consistency measure to indicate when the measurements are repeated twice with the same respondents, the results would essentially be the same. The range of the values for Cronbach's Alpha ranges between 0 to +1. 0, and the closer to the value to 1 the higher degree of internal consistency will be.

Table (3.10) illustrates that the Cronbach's Alpha values for all Factors are higher than 0.770 except the Internal process effectiveness construct which has a value of 0.587. Additionally, Cronbach's Alpha for the entire study equals 0.959 which indicates that the entire questionnaire has a high level of consistency, and in turn has a high level of reliability. This

means that the higher the value of Cronbach's Alpha coefficient, the higher the reliability within the normal range of 0 and +1. Guttman value for split-Half reliability exceeds the critical value (0.65) for all constructs, except for the construct of Internal process effectiveness. This construct will be treated with great care in the upcoming analysis. Additionally, composite reliability (CR) was calculated for all constructs, and all value of (CR) is located above the critical level of 0.7, again indicating a high level of reliability. Consequently, as the results of the above-listed tests, it concluded that the questionnaire of this study is sufficiently reliable to proceed with the rest of the data analysis.

**Table(3.10): Reliability Statistics**

Factor	N of Items	Cronbach's Alpha	Guttman split-half	Composite Reliability
Planning	6	.940	0.922	0.711
Analysis	4	.863	0.880	0.738
Integration	6	.941	0.963	0.723
Action	5	.942	0.947	0.813
Maturity	4	.929	0.925	0.789
Benchmarking	24	.969	0.906	-
Internal process effectiveness	3	.770	0.626	0.711
Benchmarking Obstacles	4	.587	0.698	0.643
Questioner	31	.959	0.881	-

### 3.14 Validity Analysis

In this section, the test of construct validity through convergent validity and correlation coefficient showed. Convergent validity which is a subtype of Construct validity and relates to the assessment of the suitability to measure the phenomena being tested in the study. To check it out, the researcher used Exploratory Factor Analysis (EFA) with the application of varimaxrotation. Tables (3.7&3.9) shows the proportion of the variance of a specific variable

explained by all the derived factors. Furthermore, the communalities are the squared value of multiple correlations for an item when all factors are considered as predictors. The communalities extraction shows the proportion of each variable's variance that can be explained by all factors. As we can see from the Tables (3.7&3.9), all variables have an extraction commonality more than 60%, which indicates that all indicators are in the common factor space, all factor loadings are more than 50%, which shows each construct satisfies the convergent validity. Table (3.11) shows the correlation coefficient for each item with its construct. Whereas all coefficients are significant at a significant level of 0.01, and a correlation coefficient greater than 0.50.

**Table (3.11): Construct Validity through the Correlation Coefficient**

Planning		Analysis		Integration		Action		Maturity	
Items	Corr.coff	Items	Corr.coff	Items	Corr.coff	Items	Corr.coff	Items	Corr.coff
PL1	.838**	AN1	.957**	IN1	.898**	AC1	.915**	MA1	.960
PL2	.854**	AN2	.963**	IN2	.874**	AC2	.938**	MA2	.873
PL3	.895**	AN3	.821**	IN3	.866**	AC3	.916**	MA3	.925
PL4	.924**	AN4	.659**	IN4	.848**	AC4	.933**	MA4	.888
PL5	.869**			IN5	.892**	AC5	.916**		
PL6	.892**			IN6	.952**				
Benchmarking Obstacles		Internal Process effectiveness							
Items	Corr.coff	Items	Corr.coff						
EF1	.824**	EFF1	0.669**						
EF2	.819**	EFF2	0.842**						
EF3	.543**	EFF3	.759**						
EF4	.760**								



## **Chapter Four: Results and Discussions**

### **4.1 Overview:**

This chapter includes the presentation of data analysis and testing the research hypotheses by answering the research questions and reviewing the main results of the questionnaire reached through analyzing the various paragraphs. SPSS program was used to obtain the results of the research that will be presented and analyzed in this chapter. Results of the study presented to answer the questions that appeared and were included in the questionnaire, and which represent the problem of the study after collecting the data required by the study tool. Several results were reached, and advice for future research is offered to researchers in the same field, both at universities and in any other organization.

### **4.2 Profile of Respondent Characteristics**

Through the questionnaire, certain demographic characteristics of masters' programs that included four items observed as shown in Table (4.1), which contains the frequency and percentage for each variable listed according to the survey categories.

As shown in Table (4.1), 90% of programs are from public universities, while 6% from private universities, and only 4% from government universities. The survey results show that all universities do have strategic plans. However 92% of the programs in these universities did have a strategic plan for their master programs, while 8% did not have any strategic plan. Furthermore, there are only two programs performed jointly with other universities.

**Table (4.1): Results of Analyzing Qualitative Demographic Variables**

Variable	Options	Frequency	Percent %
Type of university	Public	45	90.0
	Private	3	6.0
	Government	2	4.0
The University has a strategic plan	Yes	50	100
	No	0	0
	Don't Know	0	0
The Master's program has a strategic plan	Yes	46	92.0
	No	4	8.0
	Don't Know	0	0
The university partnership with another university	Yes	2	4.0
	No	48	96.0

Table(4.2) indicates that the mean age of programs in the sample is 11.1 years. It also shows that the maximum age of all master programs in this sample is 33 years, while the minimum age is one year. The average number of students who are registered annually is 14.44, while the mean number of students annually graduated is 8.5.

**Table (4.2): Results of Analyzing Quantitative Demographic Variables:**

Variable	Mean	Std. Deviation	Minimum	Maximum
Age of the program since its establishment	11.1	9.24	1	<b>33</b>
number of students registered annually	14.44	8.88	0	<b>40</b>
Number of students annually graduated	8.51	8.89	0	<b>30</b>

### 4.3 Descriptive Statistics

In this section, the descriptive statistic of the main issues related to benchmarking is displayed. Next, to that, the research hypotheses will be tested and discussed in view of the research sample.

To see how universities are developing their master programs and to see whether these universities are employing benchmarking as a strategic option, the survey investigated the extent to which their master programs are built in reference to some famous international universities. Figure (3) summarizes the responses of local universities in respect, as it depicts the status of benchmarking master programs launched by local universities with other universities.

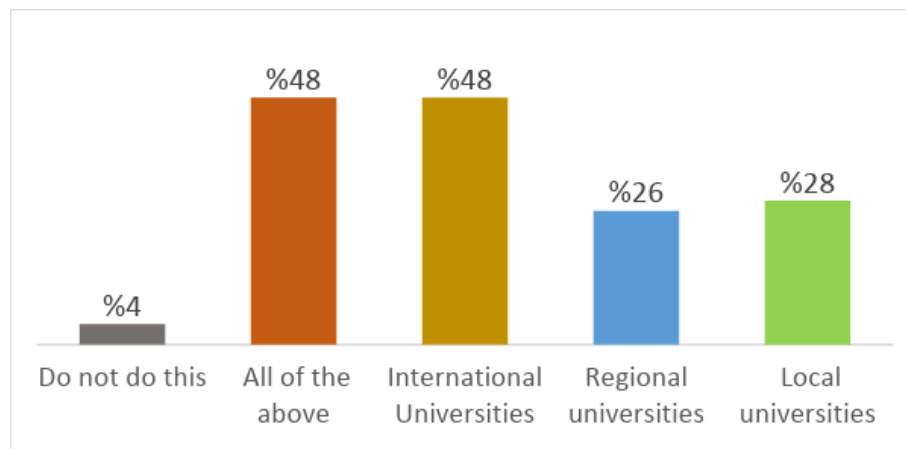


Figure (3): Status of benchmarking master programs launched by local universities with other universities

As is depicted by Figure (3), 48% of master programs directors benchmarked their programs with local, regional, and international universities at the same time, i.e. benefiting from local, regional and international expertise. However, of the whole sample, 48% of all programs are benchmarked only with international universities, 28% benchmarked with local universities,

and 26% are benchmarked with regional universities. Out of all programs included in the study, 4% have not benchmarked their program with any universities. About 89% of all respondents, reported that the benchmarking of other universities have led to the opening of a new master program. This indicates the centrality of benchmarking as a strategic approach in the field of graduate studies and benchmarking method implement although they don't know the concept they practice it.

To investigate the areas where benchmarking has been most useful, the participants were requested to report about the areas in which they strongly believe they benefited from benchmarking, as shown in Figure (4).

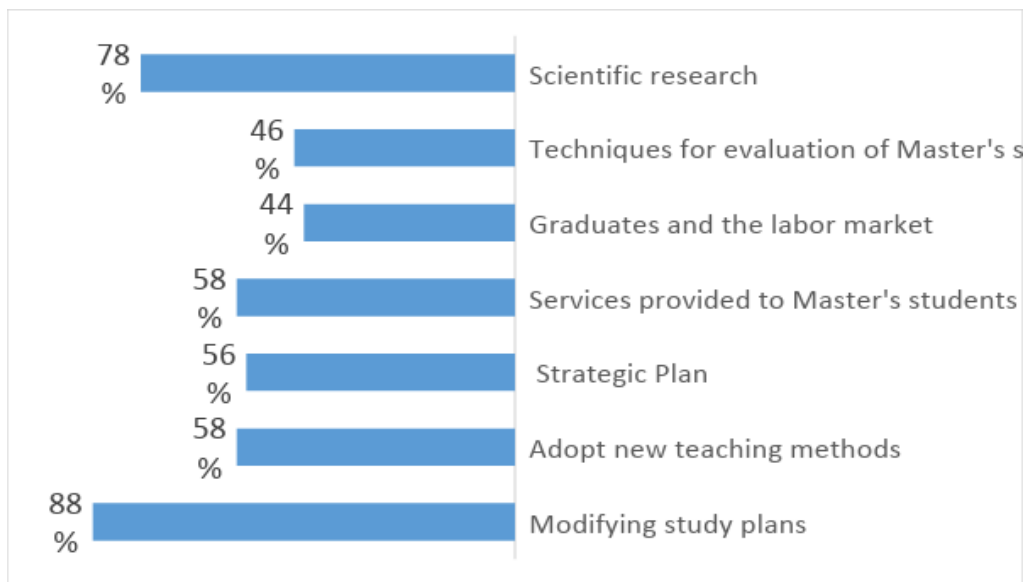


Figure (4): Areas of benchmarking implementation in master programs in Palestinian universities

Figure 4 shows that benchmarking in the Palestinian master programs was most useful in the modification of study plans by 88%, followed by scientific research, where benchmarking was used by 78%. However, benchmarking was used at its lowest level with respect for finding graduate programs that fit the labor market needs, as reported by 44 %.

The researcher attributed this to the reason for the requirements required by the MoHE to accredit new master program, which includes scientific research and development of study plans through the benchmark with other universities, then these practices become weak because the directors become less motives. This agrees with the study of Peshtawi and Alami,(2009).

#### **4.4 Research Questions Results**

The scale used in this study was a 7-Likert scale. The researcher used five main classes for easier response interpretation. Table (4.3) illustrates the distribution of mean value into one of the agreement classes, (Khamis,2012).

**Table (4.3): Distribution of Mean Value into one of the agreement classes**

Mean Range	Agreement Classes
Less than 2.20	Very Low
2.20- 3.39	Low
3.40- 4.59	Moderate
4.60- 5.79	High
More than 5.80	Very High

Starting with the following question:

Do the Directors of masters programs acquire the knowledge on benchmarking method and its dimensions in regards to planning, analysis, integration, action, and maturity?

To answer this question the means and standard deviation scores for the study sample response on the extent of implementation of the benchmarking steps in the master programs calculated, as shown in Table (4.4).

It has been noted from Table (4.4) that the mean and standard deviation scores of sample response for implementation of the benchmarking stages in the master programs are (5.6288) and the standard deviation is (.83866) This shows that the implementation of benchmarking stages come in a high rank. Maturity stage has the highest mean score (5.7700), followed by Action and Planning (5.6960),(5.6960), respectively. Moreover, the Analysis has got the lowest mean score (5.2650).

The results of the descriptive statistical analysis for the research questions of benchmarking paragraphs showed high perceptions of all paragraphs and dimensions. This indicates that master programs directors perspective in the Palestinian universities in the West Bank they follow corrective and scientific practices in the field of benchmarking. This comes in agreement with the study of (Ali, Sadeq, and Ibrahim, 2017) which showed that faculty members of the Lebanese French University believe that academic leaders at the university follow corrective practices in the field of benchmarking.

**Table (4.4): Mean and standard deviation for the implementation of benchmarking processes**

Step	Mean	Standard deviation
Planning	5.6867	.90891
Analysis	5.2650	1.05513
Integration	5.6633	.91007
Action	5.6960	.95382
Maturity	5.7700	1.13146
Benchmarking	5.6288	.83866

Comparing the results of the analysis benchmarking paragraphs with the previous studies, we find some differences which are attributed to the difference in the environment in addition to the variance of the number of the samples.

**Table (4.4.1): Comparison between results of benchmarking analysis paragraphs with previous studies**

Benchmarking steps	Albatta 2015	Mutaire 2011	Ali, Sadeq, and Ibrahim, 2017	This study 2018
Planning	5	2	3	3
Analysis	3	1	4	5
Integration	4	3	5	4
Action	1	5	1	2
Maturity	2	4	2	1

Now, discussing the obstacles that face the implementation benchmarking in the master programs by Palestinian universities. It has been found the mean and the standard deviation of each item for each obstacle as depicted by in Table (4.5). It is important to note that the most difficult obstacles were the low level of involvement by concerned staff members. The university inability to adopt procedures has the lowest impact in launching master programs, as the mean of participants in relation to this is slightly lower than neutral on the Likert scale level. This study is consistent with Yasin (2002) study.

**Table (4.5): Mean and standard deviation for obstacles that face the master program in a Palestinian university**

Item	Mean	Standard deviation
The high cost of benchmarking implementation	4.1600	1.47579
Low level of involvement by concerned staff	4.6400	1.50861
Lack of cooperation of senior management at reference university	3.9800	1.53184
University's inability to adopt the procedures followed at the reference university	3.8200	1.59962



#### 4.5 Model Development:

In this section, the intention is to investigate the possibility of building a regression model for the internal process effectiveness as a function of the benchmarking steps, as described by the study. One multiple regression model was developed. The specification of the regression model is as follow:

##### *Internal Process Effectiveness*

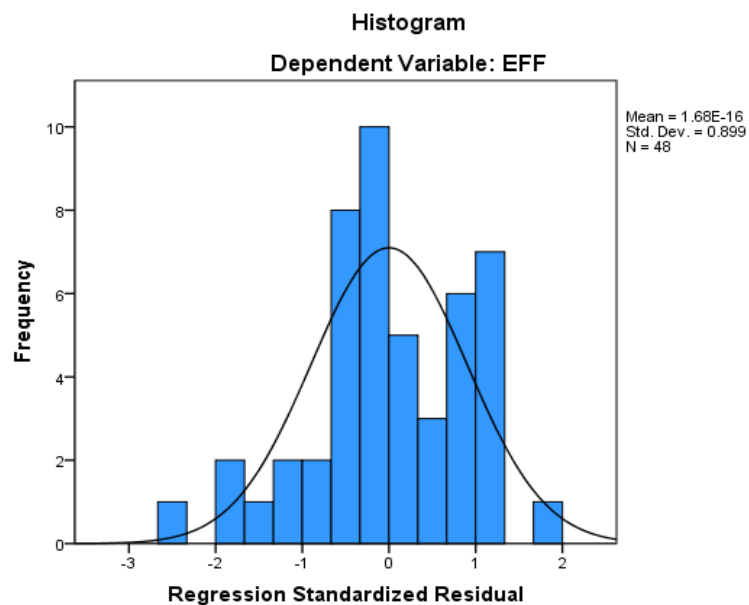
$$\begin{aligned}
 &= \beta_0 + \beta_1 \textit{Planning} + \beta_2 \textit{Analysis} + \beta_3 \textit{Integration} + \beta_4 \textit{Action} \\
 &+ \beta_5 \textit{Maturity} + \beta_6 \textit{Splane dummy} + \beta_7 \textit{SUplan dummy} \\
 &+ \textit{Nstudents} + \textit{Benchmarking Obstacles}
 \end{aligned}$$

The regression model shown by the equation is initially estimated by using the variable derived from factor analysis. it also tests the effect of having a strategic plan for the master program (*Splane*) and university (SUplans a dummy variable), the number of students enrolled annually (Nstudents), and benchmarking obstacles.

Before applying regression, two important assumptions for the regression model checked; the first is about homoscedasticity which means that the mean of residual is approximately equal for all predicted score (Hair,et,al 1995). To check this, using the Breusch-Pagan / Cook-Weisberg test, where the error variance in the null hypothesis is equal for all variables, however, in the alternative hypothesis, the error variance is a multiplicative function for one or more variables. By applying this test, the value of chi-square = 0.32, indicates the model has no problem with heteroscedasticity. The P-value is 0.57 > 0.05, so the alternative hypotheses which mean that the model does not suffer from heteroscedasticity rejected.

The second assumption is model multicollinearity, which occurs when any single predictor variable is highly correlated with another set of predictor variables (Mayer, 1999).

According to the analysis of multiple regression, and the data represented in Table (4.6), results show that tolerance value was between 0.189 and 0.663, and the value of variance inflation factor (VIF) range between 1.508 and 3.989. Given that tolerance value is substantial  $> 0.10$  and the VIF value is  $< 10$ , it is concluded that multicollinearity among the variables does not constitute a problem. Based on the last assumption.



**Figure (5): Regression Standardized Residual**

Figure (5) represents the residual histogram (errors) which are approximately normally distributed and the mean value  $= -1.68 \times 10^{-16}$ , and standard deviation = 0.889.

In regression Table (4.6), the "R" value shows how strong the relationship is between a dependent variable and all independent variables, while "R squared" clarifies the variation

independent variable attributed to dependent variables. In this study, the "R" value is 0.692, which means the existence of a moderate positive relationship between the effectiveness of the internal process and benchmarking steps. R squared equals to 0.478, which means that 47.8% of the variation in the dependent variable (Internal process effectiveness) is explained by variation in the independent variables, independent variable (benchmarking steps), benchmarking obstacles, and the dummy variables that included: the existing strategic plan for master program, existence strategic plan for university, and the average number of student who is enrolled annually in the program).

The multiple regression model was used to determine the relationship between benchmarking steps and independent variables (As shown in Table 4.6). The results revealed the existence of a significant relationship between benchmarking and the effectiveness of internal process ( $P=0.001<0.05$ ). This implies that the implementation of benchmarking stages will lead to the effectiveness of the internal process. This is consistent with (Ali, Sadeq, and Ibrahim, 2017) study which shows the same result. This study is distinguished by including the dummy variables with benchmarking steps to determine the effect and correlation on the effectiveness, and this is the first study which includes these dummy variables and benchmarking obstacles.

Integration has a positive relationship with the effectiveness of the internal process. Additionally, it has a significant impact on it ( $p=0.003 < 0.05$ ). If the action increases by 10%, the internal process effectiveness will increase by 86.2%. Moreover, Action has a significant impact on organizational effectiveness ( $p=0.009 < 0.05$ ), and if action increases by 10% internal process effectiveness will increase by 62.8%. Similarly, maturity has a positive

relationship with internal process effectiveness, it has a significant impact at ( $p=0.042<0.05$ ), which means that if the maturity increase by 10%, the internal process effectiveness will increase by 39.5%. However, planning and analysis have no significant influence on the effectiveness of the internal process. This attributed this to the fact that the planning and analysis stages are the primary images of the working mechanism when the director regularly reviews plans for the success of benchmarking processes, follows planning processes for benchmarking activities and adopts clear criteria to conduct benchmarking so these stages do not reach the actual result of implementation.

The result shows a difference in internal process effectiveness between a master program that has a strategic plan and other programs that don't. On the other hand, there are no differences between the internal process effectiveness of universities that have a strategic plan and others that don't. Finally, Benchmarking Obstacles has a negative relationship with internal process effectiveness, it has a significant impact at ( $p=0.022<0.05$ ), which means that if Benchmarking Obstacles increases by 10%, the internal process effectiveness will decrease by 34.4%

**Table(4.6): Regression Model**

Model	Unstandardized Coefficients		standardized Coefficients		T	Sig.	Collinearity Statistics	
	B	Std.Error	Beta				Tolerance	VIF
(Constant)	.636	1.005			.633	.531		
Planning	.388	.231	.394		1.683	.101	.251	<b>3.989</b>
Analysis	.021	.166	.021		.126	.901	.482	<b>2.074</b>
Integration	.841	.263	.862		3.194	.003	.189	<b>5.304</b>
Action	.609	.219	.628		2.775	.009	.268	<b>3.734</b>
Maturity	.386	.183	.395		2.108	.042	.391	<b>2.557</b>
Splane dummy	1.342	.571	.381		2.350	.024	.522	<b>1.915</b>
SUplane dummy	.732	1.058	.107		.692	.493	.569	<b>1.757</b>
Nstudents	-.005	.016	-.046		-.312	.757	.642	<b>1.557</b>
Obsatcles	-.344	.144	-.343		-2.387	.022	.663	<b>1.508</b>
P-value		0.001						
R-squared		0.692						
R		0.478						

It can be concluded that the benchmarking factors which improve effectiveness internal process are Integration, Action, and Maturity.

#### 4.6 Hypotheses Testing

1. **H0: There is no difference between joint and non-joint programs with respect to internal process effectiveness**

To examine the difference between joint and non-joint programs with respect to internal process effectiveness, the Mann-Whitney U Test used. Table (4.6.1) shows that the sample has two joint programs whereas 48 are not joint. Moreover,  $p\text{-value} = (0.048 < 0.05)$ , so H0 is rejected. The median of a joint program higher than the non-joint program which means there is a collaboration and effectiveness process in partnership programs with other universities. This is consistent with Spoth, Greenberg, Bierman, & Redmond, (2004) study.

Table (4.6.1): Mann-Whitney U Test

		N	Mean Rank	Test value	Sig
<b>The university partnering this program with another university</b>	No	48	26.29	10.000	.048
	Yes	2	6.50		

2. **H0: There is no difference in internal process effectiveness between universities that benchmark program with local, regional and international universities**

To examine the difference in internal process effectiveness between universities that compare their programs with other universities, the Mann-Whitney U Test used. Table (4.6.2) shows that there is a difference in internal process effectiveness with any university

that compares its master program with the all (international, local, and Regional) universities and others that don't have any type of comparison, and  $p\text{-value}=(0.047<0.05)$ . However, there is no difference in internal process effectiveness between universities that compare their program with (Local universities, Regional universities, Do not do this that, and international universities) which mean universities are benefited from benchmarking when it is comparing with local, regional and international universities with each other not just with one of them.

Table (4.6.2): Mann-Whitney U Test

		N	Mean Rank	Test value	Sig
<b>Local universities</b>	No	36	25.21	241.500	.811
	Yes	14	26.25		
<b>Regional universities</b>	No	37	25.23	230.500	.816
	Yes	13	26.27		
<b>International Universities</b>	No	26	26.85	277.000	.475
	Yes	24	24.04		
<b>All of the above</b>	No	26	21.75	214.500	.047
	Yes	24	29.56		
<b>Do not do this</b>	No	48	25.67	40.000	.677
	Yes	2	21.50		

3. **H0: There is no difference between internal process effectiveness with respect to university type**

To examine the difference between internal process effectiveness and universities type the Mann-Whitney U Test used. Table(4.6.3) shows that there was no evidence to reject H0 hypothesis such that  $p\text{-value} = (0.056 > 0.05)$ . This is because the program director acts as an academic, not based on the university type(private, public or government).

Table (4.6.3): Mann-Whitney U Test

		N	Mean Rank	Chi-square	df	Asymp-sing
<b>University type</b>	Public	45	25.44	3.167	2	0.205
	Private	3	17.00			
	Government	2	39.50			

4. **H0: There is no difference between benchmarking obstacles with respect to university type**

To examine the difference between benchmarking obstacles and universities type, the Mann-Whitney U Test used. Table (4.6.4 ) shows that there was no evidence to reject H0 hypothesis such that  $p\text{-value} = (0.082 > 0.05)$ , and there is no difference of benchmarking obstacles and between university type (Public, Privet, and Government).

Table (4.6.4): Mann-Whitney U Test

		N	Mean Rank	Chi-square	df	Asymp-sing
Benchmarking Obstacles	Public	4	24.04	4.994	2	0.082
		5				
	Private	3	41.00			
	Government	2	35.00			



**5. H0: There is no difference between universities which compare practices (international, local, Regional, and all the previous type ) with respect to perceived benchmarking obstacles**

To examine the difference between universities which compare practices (international, local, Regional, and all the previous type ) with respect to perceived benchmarking obstacles, the Mann-Whitney U Test used. Table (4.6.5) shows that there was no evidence to reject H0 hypothesis such that all the p-value is  $< 0.05$ . Which means that all universities face the same obstacles regardless of comparing their program with regional, local or international universities.

Table (4.6.5) Mann-Whitney U Test

		N	Mean Rank	Test value	Sig
<b>Local universities</b>	No	36	26.63	211.500	.367
	Yes	14	22.61		
<b>Regional universities</b>	No	37	25.99	222.500	.681
	Yes	13	24.12		
<b>International Universities</b>	No	26	21.92	219.000	.062
	Yes	24	29.38		
<b>All of the above</b>	No	26	25.17	303.500	.865
	Yes	24	25.85		

**6. H0: There is no difference between the employed areas of benchmarking with respect to perceived obstacles.**

To examine the difference between the employed areas of benchmarking with respect to perceived obstacles, the Mann-Whitney U Test used. Table (4.6.6) shows that there is a difference between benchmarking obstacles and areas of benchmarking implementation in (Services provided to Master's students) such that  $p\text{-value}=(0.005<0.05)$ . Similarly, there is no difference in the implementation of benchmarking between universities that used these areas (opening new master's programs in the university, modifying study plans, adopting new teaching methods, strategic plan, graduates, and the labor market, techniques for evaluation of Master's students, and scientific research) and other universities that don't use them. This shows that the Services provided to Master's students are not common and agreed among the Palestinian universities yet which mean the mindset of program directors not for the customer(students) oriented.

Table (4.6.6): Mann-Whitney U Test

<b>Implementation of benchmarking</b>		<b>N</b>	<b>Mean Rank</b>	<b>Test value</b>	<b>Sig</b>
<b>Opening new master's programs in the university</b>	No	5	26.80	96.000	.689
	Yes	43	24.23		
<b>Modifying study plans</b>	No	6	25.42	131.500	.988
	Yes	44	25.51		
<b>Adopting new teaching methods</b>	No	21	28.26	246.500	.239
	Yes	29	23.50		
<b>Strategic Plan</b>	No	22	22.02	231.500	.123

	Yes	28	28.23		
<b>Services provided to Master's students</b>	No	21	18.88	165.500	.005
	Yes	29	30.29		
<b>Graduates and the labor market</b>	No	21	28.26	275.000	.506
	Yes	29	23.50		
<b>Techniques for evaluation of Master's students</b>	No	27	27.76	249.500	.220
	Yes	23	22.85		
<b>Scientific research</b>	No	11	25.41	213.500	.981
	Yes	39	25.53		

**7. H0: There is no difference between joint and non- a joint program with another university with respect to perceived obstacles**

To examine the difference between join and a non- joint program with another university with respect to perceived obstacles, the Mann-Whitney U Test used. Table (4.6.7) shows that the sample has two joint programs whereas 48 are disjoint joint. Additionally, since  $p\text{-value} = (0.283 < 0.05)$ , so  $H_0$  is not rejected. This shows that the obstacles faced by joint programs are the same for non-joint programs with other universities.

Table (4.6.7): Mann-Whitney U Test

		N	Mean Rank	Test value	Sig
<b>The university partners this program with another university</b>	No	48	25.94	27.000	.283
	Yes	2	15.00		

**8. H0: There is no difference between Master's programs with-without a strategic plan with respect to perceived obstacles**

To examine the difference between Master's programs with-without a strategic plan with respect to perceived obstacles, the Mann-Whitney U Test used. Table 4.6.8 shows that the sample includes four programs that don't have any strategic plan whereas 46 have, Since  $p\text{-value}=(0.543<0.05)$ , so  $H_0$  is accepted. This shows that the existence of the strategic plan for master programs in the Palestinian universities did not solve the obstacles and problems that facing the programs and the strategic plan just document.

Table (4.6.8): Mann-Whitney U Test

		N	Mean Rank	Test value	Sig
<b>The Master's programs have a strategic plan</b>	No	4	21.38	75.500	.543
	Yes	46	25.86		

**9. H0: There is no association between benchmarking obstacles with respect to program age and number of years as a program director**

To examine the relation between benchmarking obstacles and (program age, and a number of years as a program director), the Pearson correlation coefficient used. Table (4.6.9) shows that there is no relation between benchmarking obstacles and program age. Since that  $p\text{-value}= (0.645<0.05)$ , so  $H_0$  is accepted. Additionally, there is no relation between benchmarking obstacles and the number of years as a program director. Because  $p\text{-value}=$

( $0.751 < 0.05$ ),  $H_0$  is not reject. This shows that the learning curve and career do not increase with an increase in program age and years of work as a director for programs.

Table (4.6.9): Pearson Correlation Coefficient

Variables	Obstacles
<b>program age</b>	Pearson Correlation - .067
	Sig. (2-tailed) .645
	N 50
<b>Number of years as a program director</b>	Pearson Correlation - .046
	Sig. (2-tailed) .751
	N 50

## **Chapter 5: Conclusion and Recommendations:**

### **5.1 Overview**

In this chapter, conclusions will be drawn from the discussion section and the chapter will be concluded with some recommendations for further research.

### **5.2 Conclusions**

Benchmarking is one of the central tools used by universities to adopt modern strategic management methods through continuous comparison of their processes with the best performing universities. Benchmarking is a continuous learning process based on acquiring knowledge from the best practices available at other universities. This is why benchmarking is an effective way to introduce improvements and enhance the institution's performance. Using benchmarking leads to the identification of the negative aspects that are occurring in the organization's processes, in an attempt to fix them. The research was conducted in the academic year 2018 and was limited to measuring the extent to which benchmarking was applied in the master's programs in the Palestinian universities limited to the West Bank. And the impact of applying benchmarking on the effectiveness of the internal processes and the obstacles of applying benchmarking. The study proved that the directors of master programs in Palestinian universities in the West Bank have high knowledge in benchmarking through following corrective and scientific practices in the field of benchmarking to enhance the internal process effectiveness for its various activities. The concept of benchmarking also requires the creation of a multidisciplinary task force, with high qualifications for its achievement. The results of the data analysis phase revealed the status of benchmarking among Palestinian higher educational institutions. It has been found that around 50% of all master programs launched by national

universities were developed and implemented with reference to an international benchmarking reference. Some of these benchmarked master programs are even local or regional. Additionally, program managers reported that they use benchmarking in various fields in relation to administrative, research and academic processes. Remarkable to mention, scientific research, modification of study plans, in addition to the adoption of new teaching methods, and evaluation of master programs.

To the best of the researcher's knowledge, this study is the first of its kind that presents and evaluates benchmarking as a continuous improvement method that enhances universities' practices. This will be detailed in the case of adopting master degrees by these universities. This research is vital to PHEIs since it contributes to enhance the perception and practices of this modern continuous improvement method, and encourage these universities to implement it.

### **5.3 Recommendations**

In light of the results obtained, and after discussing these results, several recommendations reached:

1. The need to have a clear understanding of what is happening in the organization for continuous improvement by adopting a clear plan for the required change in the organization and removing obstacles to these plans.
2. Organizations must employ skillful employees to carry out tasks entrusted to them to achieve success and competitiveness with other organizations.
3. To address the weak understanding of the benchmarking process and the current evaluation techniques of some Masters Programs director observed during the field

visits to universities, where it was noted that the existing benchmarking are merely primitive comparisons.

4. Taking into account many points in the implementation of benchmarking process, most importantly a good investment of resources, good selection of external partners, competitiveness, organizational changes, adequate skills, external factors, a legal system, effective communication.



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**Annex 1: List of Arbitrators of questionnaire:**

- Dr. Waseem Sultan , Projects Management Instructor. Palestine Polytechnic University.
- Dr. Amjad Natsheh, Strategic Planning instructor. Palestine Polytechnic University.
- Dr. Rami Arafah, Biotechnology Research Centre director. Palestine Polytechnic University.
- Dr. Jamal Abu Rayah, MBA instructor .Hebron University.
- Dr. Motasem Natsheh, Head of Department of Administrative Sciences at Palestine Polytechnic University.

## Annex 2: Questionnaire

# The Arab American University



## College of Graduate Studies

### Master Program in Strategic Planning and Fundraising

*Greetings,*

The researcher, *Nour Al-Junaidi*, from the College of Graduate Studies at the Arab American University, and under the supervision of Dr. Khalid Rabaiya, is conducting research titled:

### Assessment of Benchmarking as a Strategic Planning Method as Implemented by Palestinian Universities in Adopting Their Master Programs

Your answers will be kept confidential and will be used only for the purposes of scientific research. Therefore, I kindly request you to read and answer all questions.

*The researcher*  
*Nour Al-Junaidi*  
 2018

**Note:** Benchmarking is a constant process used to measure the performance of services and products for a specific production unit. This process is performed by comparing this unit with other best performing units or with those that perform similar processes.

**Part One:**

1.	How long have you been working as the program's director?	_____ Years		
2.	When was this program established?	_____ Years		
3.	Average number of students per year	_____		
4.	Does the university have a strategic plan?	· Yes	· No	· I don't know
5.	Does the Master Program have a strategic plan?	· Yes	· No	· I don't know
6.	Is this program joint with another university?	· Yes	· No	Mention _____
7.	Type of University	· Public	· Private	· Governmental
8.	Number of students who annually graduate from the program	_____ Graduates		
9.	The University compares its Master Programs with	· Local Universities · Regional Universities · International Universities · All of the above · Does not compare its Master Programs		
10.	Has benchmarking led to opening new master programs at the university?	· Yes	· No	
11.	Areas where benchmarking is used	· Modification of study plans · Adoption of new teaching methods · The strategic plan · Services offered to Master students · Master graduates and labor market · Evaluation techniques · Scientific Research		

## **Part Two:**

### ***First: Planning***

The formation of a benchmarking team to specify the processes that need to be compared, select partners, determine methods of collecting necessary data and specify methods of measuring partners' performance.

	<b>Planning</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>I agree to Some extent</b>	<b>Neutral</b>	<b>Disagree</b>	<b>I disagree with Some extent</b>	<b>Strongly Disagree</b>
1.	The program's director appropriately plans benchmarking procedures							
2.	The director considers the best practices to conduct benchmarking							
3.	The director follows up leading universities to take them as references							
4.	The director regularly reviews plans for the success of benchmarking processes							
5.	The director follows planning processes for benchmarking activities							
6.	The director adopts clear criteria to conduct benchmarking							

### **Second: Analysis**

The deep understanding of current processes at the organization and the partner with whom benchmarking is conducted. It aims at identifying the size, type, and causes of the existing gap in the organization. The factors that make the partner excel in the processes included in benchmarking and future performance levels are also extrapolated.

	<b>Analysis</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>I agree to Some Extent</b>	<b>Neutral</b>	<b>Disagree</b>	<b>I disagree with Some extent</b>	<b>Strongly Disagree</b>
1.	The director carefully follows all processes taking place in the master's programs in other universities to make improvements							
2.	The director avoids gaps by conducting benchmarking							
3.	When necessary, the director resorts to external experts to analyze processes at the University							
4.	Benchmarking contributed to the discovery of a fundamental deficiency in the program that significantly improved the program							

### **Third: Integration**

A step that includes developing an executive program that specifies areas that require change, working with employees to fully accept the program, and specifying roles, resources, and methods that lead to achieving a better performance level.

	<b>Integration</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>I agree to Some extent</b>	<b>Neutral</b>	<b>Disagree</b>	<b>I disagree v Some extent</b>	<b>Strongly Disagree</b>
1.	The director follows and benefits from processes that take place in the distinguished universities							
2.	The director has a clear understanding of processes taking place in distinguished universities							
3.	To facilitate the change, the director makes the appropriate change when obstacles face the plan							
4.	The director has a clear understanding of the University's activities with a view to developing them							
5.	The University works to ensure that change is accepted by those involved in the Master's program							
6.	Directors define roles in the program to ensure that change is successful							

### **Fourth: Action**

This step involves translating the previous steps into actions and procedures, modifying, developing, and applying the best methods gained from the partner in a way that suits the organizations' environment, in addition to monitoring results and the level of progress made.

	<b>Action</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>I Agree to Some extent</b>	<b>Neutral</b>	<b>Disagree</b>	<b>I disagree v Some extent</b>	<b>Strongly Disagree</b>
1.	Measures are taken to ensure the success of the change during implementation							
2.	The director has the skills to adopt the best methods to make a difference							
3.	The director has the ability to select the best methods to make a change							
4.	The director selects the best methods that suit the program's environment.							
5.	The director follows-up the implementation of change until its final stages							

**Fifth: Maturity**

This step includes the transference of the best methods that have been transferred from the partner into the organization. It must result in the treatment of the negative gap, and lead to better performance of the productive unit.

	<b>Maturity</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>I agree to Some extent</b>	<b>Neutral</b>	<b>Disagree</b>	<b>I disagree Some extent</b>	<b>Strongly Disagree</b>
1.	The director recognizes the importance of competition with other universities							
2.	The director conducts ongoing benchmarking with other universities							
3.	The director seeks the best performance through conducting benchmarking with universities							
4.	The director has the ability to accomplish tasks to achieve competitiveness with universities							

**Part Three:**

	<b>Organizational Effectiveness</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>I agree to Some extent</b>	<b>Neutral</b>	<b>Disagree</b>	<b>I Disagree with Some extent</b>	<b>Strongly Disagree</b>
	<b>The effectiveness of Internal Processes</b>							
1.	The University has the ability to streamline and simplify work procedures.							
2.	The university has an effective control system.							
3.	There is an easy flow of information between the scientific departments and administrative units at the university.							
4.	Employees can get the information they need.							

**Part Four:**

	<b>Obstacles facing Benchmarking Application</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>I agree to Some extent</b>	<b>Neutral</b>	<b>Disagree</b>	<b>I Disagree with Some extent</b>	<b>Strongly Disagree</b>
1.	The cost of benchmarking implementing is high							
2.	Concerned staff responses are slow							
3.	Lack of cooperation of senior management at reference university							
4.	The university is unable to adopt the procedures followed at the reference university							



## ملخص الدراسة:

أثبتت المقارنة المرجعية أنها أداة استراتيجية فعالة في تحسين الأداء في المؤسسات بمختلف أنواعها وأحجامها، ومع ذلك فإن المقارنة المرجعية بصفتها أداة للتخطيط الاستراتيجي لم تحظ بالاهتمام الذي تستحقه من الشركات العربية والمنظمات غير التجارية وكذلك المؤسسات البحثية، إننا نعتقد أن بعض المنظمات تعمل إلى حد ما على وضع معايير مرجعية في تخطيط البرامج والعمليات وتنفيذها، وهناك عدة تساؤلات في هذا الموضوع وهي: ما هو اجمالي نسبة المنظمات التي تتبنى المقارنة المرجعية كأداة تخطيط استراتيجي؟

وهل تطبق هذه المنظمات ما يضمن معدلات نجاح عالية لهذه الاداة؟

للإجابة على هذه الأسئلة، أجريت هذه الدراسة على الجامعات الفلسطينية، ودراسة كيفية استخدام المقارنة المرجعية في اعتماد برامج الماجستير وتخطيطها وتنفيذها، وبالتحديد تناولت الدراسة مدى تطبيق المعايير في تخطيط وتبني برامج الماجستير من قبل الجامعات الفلسطينية، كما يهدف أيضاً إلى اكتشاف الفرص؛ لتحسين الأداء، بالإضافة إلى ذلك تهدف إلى اكتشاف العقبات التي تحول دون تطبيق المقارنة المرجعية بشكل فعال في الجامعات الفلسطينية في الضفة الغربية.

هدف هذا البحث إلى التعرف على مدى تطبيق اسلوب المقارنة المرجعية في برامج الماجستير في الجامعات الفلسطينية ومعوقات التطبيق، وأثر ذلك على فاعلية العمليات الداخلية في كليات الدراسات العليا لدى الجامعات الفلسطينية في الضفة الغربية من خلال تناوله لأسلوب المقارنة المرجعية كأسلوب تحسين مستمر بغرض التحسين والتطوير.

في محاولة لتحقيق أهداف البحث، اختارت الباحثة عينة تضم تسع جامعات، وتم أخذ خمسون استبياناً من كل جامعة، حيث تم شغلها بشكل صحيح والتحقق من صحتها، وتم تحليل البيانات التي تم جمعها من هذه الاستبيانات بواسطة الحزمة الإحصائية للعلوم الاجتماعية.

أظهرت نتائج التحليل أن الجامعات تنفذ مراحل المقارنة المرجعية وهي: (التخطيط, التحليل, التكامل, التنفيذ والنضج) بدرجة عالية على النحو المبين في قياس الوسط الحسابي لهذه المراحل، وكشف تحليل البيانات الوصفية في الدراسة أن العقبات الرئيسية التي يواجهها مدراء البرامج هي عدم تعاون الإدارة العليا والموظفين المعنيين ، بالإضافة إلى التكلفة المتكبدة لعملية المقارنة .

ومن الإسهامات الرئيسية في هذه الدراسة: هي النجاح في بناء نموذج الانحدار لفعالية العملية الداخلية لكليات الدراسات العليا كدليل للنجاح في تنفيذ خطوات المقارنة المرجعية، بالإضافة إلى وجود خطة استراتيجية للجامعة وبرنامج الماجستير، وعدد الطلاب المسجلين في البرنامج سنوياً، ومعوقات تطبيق المقارنة المرجعية. فسر النموذج الذي تم اختباره بشكل كبير وموثوق به حيث بلغت قيمة "R-square" ما نسبته 47.8%.

وقدمت الباحثة عدة توصيات شملت الحاجة إلى تطبيق المقارنة المرجعية؛ لضمان تنافس الجامعات بشكل صحيح مع الجامعات الأخرى المتميزة لتحقيق تفوق تنافسي مستمر، وتعد هذه الدراسة الأولى من نوعها ، حيث تقدم وتقيم المقارنة المرجعية كأسلوب للتحسين المستمر الذي يعزز ممارسة الجامعات.

الكلمات المفتاحية: المقارنة المرجعية ، فعالية العمليات الداخلية ، برامج الماجستير.