



جامعة المستقبل
Mustaqbal University
أول جامعة أهلية بمنطقة القصيم

Performance Indicators and Benchmarking Guide

Prepared by
Quality and Accreditation Department

First Release
January 2025



Guide Identification Card

Guide Name	Key Performance Indicators and Benchmarking Guide
Code	UOM-QA-QAD-GUI-008-V
Objective	Guiding the University's teaching staff to understand, prepare, calculate, and evaluate the KPIs applying benchmarking
Owner	The Quality and Accreditation Department
Reference/References	NCAAA UOM Quality System of Academic Programs
Scope	The University's quality units and committees, and the teaching staff
Approved by	The Quality and Accreditation Standing Committee
First Release	January 2025
Recent Review	Planned every 2 years
Current Edition	1 st , January 2025

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



Contents

I. Performance Indicators

- 1.1 Introduction
 - 1.1.1 Quality Terminology
 - 1.1.2 The Concept of Indicators
- 1.2 Performance Indicators Approved by the University
 - 1.2.1 KPIs Recommended by the NCAAA
 - 1.2.2 Additional Performance Indicators Adopted by the University
- 1.3 Objectives and Polarity
- 1.4 Methods for Calculating the NCAAA KPIs
- 1.5 Analysis of Performance Indicators
- 1.6 Identification of Strengths and Opportunities for Improvement
- 1.7 Formulating Improvement Recommendations and Implementation Plans

II. Benchmarking

- 2.1 Benchmarking Definition
- 2.2 Types of Benchmarking
- 2.3 The Importance of Benchmarking
- 2.4 Reference Controls for Universities (Programs)
- 2.5 Steps of Applying a Benchmarking Process
- 2.6 Lessons Learned from Best Practices
- 2.7 Tips for Ensuring a Successful Benchmarking

I. Performance Indicators

1.1- Introduction

We like to start by thanking God, asking for his forgiveness and guidance, we pray and salute our Prophet Muhammad (peace be upon him), then next,, Based on the commitment of the Mustaqbal University to adopt the standards of the National Center for Academic Accreditation and Evaluation (formerly the National Commission for Academic Accreditation and Assessment)), and it's keenness to work to apply them to its various programs, and also in support of its programs that seek to obtain national accreditation, the Deanship of Quality Assurance and Accreditation develops a set of manuals to provide technical support for programs at the university level to ensure the proper performance according to the Center's standards in a manner that achieves the university's mission and strategic objectives, and to qualify advanced programs for national accreditation. Based on this, these guides have been prepared for the purpose of highlighting this scientific discourse that has high importance, and include a set of manuals, as we include the current manual "**Performance Indicators and Benchmarking Guide**", in pursuit of the Quality and Accreditation Department in Mustaqbal University, to activate mechanisms for measuring these indicators periodically. This guide has been prepared to provide a detailed explanation of all the indicators approved by the internal quality system in Mustaqbal University, according to specific timetables that clarify the measurement courses, in addition to a unified mechanism for determining the target values in light of the objectives of the University's strategic plan and "Afaak" plan.

1.1.1 Quality Terminology

To help achieve a common understanding of key concepts and terminology in the accreditation and quality assurance system, we provide definitions of some commonly used terms.

Term	Definition
Accreditation	It is a recognized certificate issued by an approved organization that confirms that the educational program or the institution is following a specific set of standards and criteria.
Programmatic Accreditation	Accrediting a program by providing the program a certificate that explains that it applies the proper standards of being acceptable as a valid educational program in a certain area with the required level.
Institutional Accreditation	Achieving the level of educational quality of the institution according to a specific set of standards and criteria established by an external authority.



Assessment	A diagnostic formula for reviewing quality and assessing the learning and teaching process and programs by examining the course curricula, the organization and infrastructure, and the mechanisms of assessing the internal quality in the university.
Academic Program	A set of correlated courses spread over a specified period that qualify the candidate in a specific specialization according to a predefined rule.
Benchmarking	The comparison points or the performance levels are used to determine the goals and evaluate the outcomes.
Evaluation	Measuring the performance according to a set of standards, predefined criteria, and thresholds.
Goals	Specific statements that apply to the missions or desires of the institution/program in specific subjects.
Graduate Attributes; GA	Characteristics and qualities demonstrated by the graduates in the field.
International Accreditation	Accrediting an institution or its programs through an accreditation agency in a different country.
KPI(s)	Selected principal performance indicators used to assess performance.
Learning Outcomes	Knowledge, skills, and values gained from participating in a specific program or taking a specific course.
Mission	It is a general, short, clear statement describing the work and purpose of a certain body
Objectives	General statements that describe and provide a guide on putting goals and detailed plans
Outcomes	The results of the teaching, learning, research, and community activities in the institution.
Quality	There are a lot of definitions for quality: It is summarized in achieving accuracy and high standards with continuous improvement.
Internal Quality Assurance	The processes done by the institution/program to ensure quality in all the activities and is assessed by the internal agency.
Quality Management	The management job is to specify and implement the quality strategy and dedicate the recourses and activities towards achieving quality.
Quality Inspection	Quality inspection is the process of evaluating and examining products (outcomes) or services to verify their conformity to required standards and specifications.
Quality Control	The process of inspecting the products (outcomes) and services, detecting variations from standard specifications, and making necessary corrections during the production process to achieve results that conform to specifications.
Quality Assurance	Quality assurance is a system or process that aims to ensure that all activities related to product (outcomes) development or service provision are carried out in accordance with predefined standards and procedures to ensure consistently high quality.

Comprehensive Quality	It is a philosophy with tools and techniques that aims to achieve the culture of continuous improvement, which is achieved by all the institution workers in order to make the clients happy.
Standards	Diagnostic evaluation criteria for evaluating the education, research, and community partnerships, the organization infrastructure, the governing policies, the leadership performance, and the mechanisms of assessing the quality in the university.

1.1.2 The Concept of Indicators

Performance indicators: specific forms of evidence used by the institution or any other agency to provide evidence of quality performance. The basic performance indicators are one of the most important tools for assessing the quality of academic programs according to the criteria and rules of the National Center for Academic Assessment and Accreditation, and are among the most prominent practices that contribute to decision-making and follow-up processes and continuous development and improvement.

There is a wide range of diverse evidence that can be used, but for a large part of the evidence to be used one must make decisions regarding items of information that can be expressed in quantitative terms and used as indicators of performance. These indicators should be identified in advance as part of the planning process. For example, when setting basic goals and objectives, certain indicators must be set so that the achievement of these goals and objectives can be monitored on an ongoing basis. Also, the scientific establishment needs to set performance indicators for application in its colleges and departments to monitor and track its operations and performance, and to make comparisons between its various colleges in order to allow the scientific institution's committees and administrative leadership to control and monitor the quality of performance in the organization continuously. Data on these indicators should be collected in a standardized framework and kept in a central database.

The use and reliance on these indicators requires a permanent evaluation of these indicators and determining their suitability, the appropriateness, and effectiveness of collecting and preserving the data necessary to calculate these indicators and then using them to judge the quality of the institution's performance and future planning.

1.1.3 Essential Hints About the Performance Indicators

The performance indicators are one of the most important tools for assessing the quality of the academic institutions according to the criteria of the NCAAA. They are among the most prominent practices that contribute to decision-making and



follow-up. There is a wide range of diverse evidence that can be used, but one must make decisions regarding items of information that can be expressed in *quantitative values*. These indicators should be identified in advance as part of the planning process. In this regard, NCAAA recommended a set of key performance indicators, KPIs, for any academic institution.

It is a recommended practice that the institution measures the KPIs with benchmarking using the appropriate tools (such as Surveys, Statistical data, etc.),

The following should be determined for each indicator:

- Actual performance
- Targeted performance level
- Internal reference (Internal benchmark)
- External reference (External benchmark)
- New target performance level
- Regular reports describing and analyzing the results of each indicator (including performance changes and comparisons according to sites and gender) are expected.
- Practical and objective identification of strengths and aspects that need improvement is to be included.

1.2 Performance Indicators Approved by the University

1.2.1 KPIs Recommended by the NCAAA

In 2023, the National Commission of Academic Accreditation and Evaluation recommended the following Key Performance Indicators as a minimum requirement for evaluating educational institutions. The recommended KPIs are presented in Table 1.

Table 1: Key Performance Indicators Recommended by the ETEC

Standard	Code	Key Performance Indicators	Description
1- Mission, Vision, and Strategic Planning	KPI-I-01	Percentage of achieved indicators of the institution's strategic plan objectives	Percentage of performance indicators of the strategic plan objectives of the institution that achieved the targeted annual level to the total number of indicators targeted for these objectives in the same year.
3- Teaching and Learning	KPI-I-02	Students' evaluation of the quality of learning experience in the programs*	In an annual survey, the Average overall rating of final year students for the quality of learning experience in the programs on a five-point scale.
	KPI-I-03	Graduates' employability and enrolment in postgraduate programs*	Percentage of graduates from undergraduate programs who, within a year of graduation, were: a. employed b. enrolled in postgraduate programs during the first year of their graduation to the total number of graduates in the same year.
	KPI-I-04	Graduation rate for Undergraduate Students in the specified period*	Percentage of undergraduate students who completed the programs during the specified period in each cohort.
	KPI-I-05	Satisfaction of beneficiaries with learning resources*	Average of beneficiaries' satisfaction rate with learning resources on a five- point scale in an annual survey in terms of: a. their adequacy and diversity (references, journals, databases... etc.) b. Support services provided for their utilization.



Standard	Code	Key Performance Indicators	Description
	KPI-I-06	Employers' evaluation of the institution graduate's proficiency*	Average of overall rating of employers for the proficiency of the institution graduates (By NQF domains) on a five-point scale in an annual survey
4- Students	KPI-I-07	Students' satisfaction with the offered services*	Average of students' satisfaction rate with the various services offered by the institution (restaurants, transport, sports facilities, academic advising, ...) on a five-point scale in an annual survey
5- Faculty and Staff	KPI-I-08	Ratio of students to teaching staff*	The ratio of the total number of students to the total number of full- time or full-time equivalent teaching staff - for the institution as a whole and each program separately
	KPI-I-09	Proportion of faculty members with doctoral qualifications*	Percentage of faculty members with verified doctoral qualifications to the total number of teaching staff
	KPI-I-10	Proportion of teaching staff leaving the institution*	Percentage of teaching staff leaving the institution annually for reasons other than age retirement to the total number of teaching staff.
6- Institutional Resources	KPI-I-11	Percentage of self-income of the institution	Percentage of self-income of the institution to the total income of the institution
	KPI-I-12	Satisfaction of beneficiaries with technical services*	Average of beneficiaries' satisfaction rate with technical services ...) on a five-point scale in an annual survey in terms of: a. Suitability. b. Safety and confidentiality. c. Availability and ease of access. d. Maintenance and support services.

Standard	Code	Key Performance Indicators	Description
7- Scientific Research and Innovation	KPI-I-13	Percentage of publications of faculty members*	Percentage of full-time faculty members who published at least one research during the year to total faculty members in the institution
	KPI-I-14	Rate of published research per faculty member*	The average number of refereed and/ or published research per faculty member during the year (total number of refereed and/or published research to the total number of full-time or equivalent faculty members during the year)
	KPI-I-15	Citations rate in refereed journals per faculty member	The average number of citations in refereed journals from published research per faculty member in the institution (total number of citations in refereed journals from published research for full-time or equivalent faculty members to the total research published)
	KPI-I-16	Number of patents, innovations, and awards of excellence	Number of: a. Patents and innovations b. Awards of excellence obtained by the institution's staff annually at the national/ regional/ international level.
	KPI-I-17	Proportion of the research budget	The proportion of the budget dedicated to research by: a. proportion of the budget dedicated to research to the total budget of the institution b. proportion of external research funding to the total research budget during the year.
	KPI-I-18	Satisfaction of beneficiaries with community services	Average of beneficiaries' satisfaction rate with the community services provided by the institution on a five-point scale in an annual survey



Standard	Code	Key Performance Indicators	Description
8- Community Partnership	KPI-I-19	Percentage of faculty members and students participating in community activities*	The percentage of faculty/students who participated in community service activities to the total faculty/students in the institution
Additional indicators for accredited institutions			
2- Governance, Leadership, and Management	KPI-I-20	Proportion of accredited programs	The proportion of programs with valid accreditation from approved accrediting bodies to the total number of programs in the institution

* Measurement levels: Institution, branches (if any), specializations (health, engineering, computer science, scientific, administrative, humanities, Arabic language, Islamic studies, etc.), gender (male, female).

1.2.2 Additional Performance Indicators Adopted by the University

The University has adopted additional performance indicators to be used by its programs, administrative units, centers, and main departments to support comprehensive evaluation of institutional performance. These additional performance indicators are accessible through the University's Quality and Accreditation Department publications, development manuals, and the websites of the relevant administrative units, centers, and academic programs.

1.3 Objectives and Polarity

Each Key Performance Indicator (KPI) is to be linked to the University's strategic objectives and evaluation criteria. The University's strategic objectives are as follows:

1. Providing best practice institutionalization, governance, and automation, and obtaining institutional accreditation.
2. Improving teaching and learning quality, and obtaining program accreditation.
3. Scientific, professional, and skill empowerment of university graduates.
4. Enhancing research, development, and postgraduate studies.
5. Providing a stimulating environment for innovations and sustainable community services.

6. Strengthening educational, research, and community partnerships
7. Developing the university's own resources, diversifying and sustaining its income sources, and marketing its services and products.

The recommended NCAAA institutional KPIs are linked to the University's strategic objectives in Table 2.

Table 2: KPIs-Objective's linkage

Standard	Code	Key Performance Indicators	Strategic objectives
1- Mission, Vision, and Strategic Planning	KPI-I-01	Percentage of achieved indicators of the institution's strategic plan objectives	1
3- Teaching and Learning	KPI-I-02	Students' evaluation of the quality of learning experience in the programs*	2
	KPI-I-03	Graduates' employability and enrolment in postgraduate programs*	3
	KPI-I-04	Graduation rate for Undergraduate Students in the specified period*	3
	KPI-I-05	Satisfaction of beneficiaries with learning resources*	2
	KPI-I-06	Employers' evaluation of the institution graduate's proficiency*	2& 3
4- Students	KPI-I-07	Students' satisfaction with the offered services*	2
5- Faculty and Staff	KPI-I-08	Ratio of students to teaching staff*	2
	KPI-I-09	Proportion of faculty members with doctoral qualifications*	2
	KPI-I-10	Proportion of teaching staff leaving the institution*	2



Standard	Code	Key Performance Indicators	Strategic objectives
6- Institutional Resources	KPI-I-11	Percentage of self-income of the institution	7
	KPI-I-12	Satisfaction of beneficiaries with technical services*	2
7- Scientific Research and Innovation	KPI-I-13	Percentage of publications of faculty members*	4
	KPI-I-14	Rate of published research per faculty member*	4
	KPI-I-15	Citations rate in refereed journals per faculty member	4
	KPI-I-16	Number of patents, innovations, and awards of excellence	4
	KPI-I-17	Proportion of the research budget	4
8- Community Partnership	KPI-I-18	Satisfaction of beneficiaries with community services	6
	KPI-I-19	Percentage of faculty members and students participating in community activities*	6
2- Governance, Leadership, and Management	KPI-I-20	Proportion of accredited programs	2

The polarity of a KPI can be either positive or negative according to the following definitions:

- A KPI has **positive polarity** if an increase in its value reflects improved performance.
- A KPI has **negative polarity** if a decrease in its value reflects improved performance.

1.4 Methods for Calculating the NCAAA KPIs

Indicator #1: Percentage of achieved indicators of the institution's strategic plan objectives

$$\text{KPI-I-1} = \frac{\text{Number of strategic plan objectives achieved}}{\text{Total number of objectives}}$$

Indicator #2: Students' evaluation of the quality of learning experience in the programs

Average overall rating by final-year students on the quality of learning experiences in the program, satisfaction with various services (cafeteria, transportation, sports facilities, academic, career, psychological counseling, etc.), and adequacy/diversity of learning resources (references, journals, databases, etc.) on a five-point scale from an annual survey.

$$\text{KPI-I-2} = \frac{\text{Sum of student evaluations on learning experience items}}{\text{Number of students surveyed}}$$

Indicator #3: Graduates' employability and enrolment in postgraduate programs*

Percentage of program graduates within one year of graduation who are:

- a. Employed within 12 months,
- b. Enrolled in postgraduate programs.

$$\text{KPI-I-3-1} = \frac{\text{Number of employed graduates}}{\text{Total graduates of the cohort}}$$

$$\text{KPI-I-3-2} = \frac{\text{Number enrolled in postgraduate programs}}{\text{Total graduates of the cohort}}$$

Indicator #4: Graduation rate for Undergraduate Students in the specified period

Percentage of undergraduate students completing the program within the minimum stipulated duration.



$$\text{KPI-I-4} = \frac{\text{Number of students completing program within minimum duration}}{\text{Total students in cohort}}$$

Indicator #5: Satisfaction of beneficiaries with learning resources*

Average satisfaction of beneficiaries on a five-point scale from an annual survey regarding:

- Adequacy and diversity of learning resources (references, journals, databases, etc.)
- Support services for resource utilization

$$\text{KPI-I-5-a} = \frac{\text{Sum of beneficiary evaluations on adequacy/diversity}}{\text{Number of beneficiaries surveyed}}$$

$$\text{KPI-I-5-b} = \frac{\text{Sum of beneficiary evaluations on support services}}{\text{Number of beneficiaries surveyed}}$$

Indicator #6: Employers' evaluation of the institution graduate's proficiency

Average rating by employers on graduates' competencies using a five-point scale from an annual survey.

$$\text{KPI-I-6} = \frac{\text{Sum of employer evaluations on graduates' competence}}{\text{Number of employers surveyed}}$$

Indicator #7: Students' satisfaction with the offered services

Average rating by students on the services provided by the program (cafeteria, transportation, sports facilities, academic counseling, etc.) using a five-point scale from an annual survey.

$$\text{KPI-I-7} = \frac{\text{Sum of student evaluations on services}}{\text{Number of students surveyed}}$$

Indicator #8: Ratio of students to teaching staff*

Ratio of total students to total full-time equivalent faculty members in the program.

$$\text{KPI-I-8} = \frac{\text{Total number of students}}{\text{Total number of faculty members}}$$

Indicator #9: Proportion of faculty members with doctoral qualifications

$$\text{KPI-I-9} = \frac{\text{Number of faculty members with PhDs}}{\text{Total faculty members}}$$

Indicator #10: Proportion of teaching staff leaving the

institution*

Percentage of faculty leaving the program annually for reasons other than retirement.

$$\text{KPI-I-10} = \frac{\text{Number of faculty leaving for non-retirement reasons}}{\text{Total faculty members}}$$

Indicator #11: Percentage of self-income of the institution

$$\text{KPI-I-11} = \frac{\text{Self-generated income}}{\text{Total institutional income}}$$

Indicator #12: Satisfaction of beneficiaries with technical services

Average satisfaction on a five-point scale in terms of:

- a. Suitability
- b. Safety and confidentiality
- c. Availability and accessibility
- d. Maintenance and support services

Indicator #13: Percentage of publications of faculty members

Percentage of full-time faculty members who published at least one research paper during the year.

$$\text{KPI-I-13} = \frac{\text{Number of faculty publishing } \geq 1 \text{ paper}}{\text{Total faculty members}}$$



Indicator #14: Rate of published research per faculty member

$$\text{KPI-I-14} = \frac{\text{Total number of refereed and/or published research papers}}{\text{Total number of full-time faculty or equivalent}}$$

Indicator #15: Citations rate in refereed journals per faculty member

$$\text{KPI-I-15-x} = \frac{\text{Total citations in refereed journals for faculty member x}}{\text{Total research papers of faculty member x}}$$

$$\text{KPI-I-15} = \text{Average of KPI-I-15-x across all faculty members}$$

Indicator #16: Number of patents, innovations, and awards of excellence

Annual count of:

- a. Patents and innovative products
- b. National and international excellence awards received by students and staff

Indicator #17: Proportion of the research budget

- a. Ratio of research budget to total institutional budget
- b. Ratio of external research funding to total research budget

Indicator #18: Satisfaction of beneficiaries with community services

Average satisfaction on a five-point scale regarding community services provided by the institution.

Indicator #19: Percentage of faculty members and students participating in community activities*

Percentage of faculty and students participating in community service activities relative to the total number of faculty and students.

Indicator #20: Proportion of accredited programs. Percentage of programs holding valid accreditation from recognized accreditation bodies relative to the total number of programs in the institution.

1.5 Analysis of the Performance Indicators' Results

Performance indicators are analyzed by determining the values of the indicators with respect to the different elements, such as the values for male students and those for female students, and the average, as well as for faculty members of both

sexes, then comparing the indicators if they apply to students and faculty and benefit from the presence of contrast or congruence.

The trend of the indicator from one year to the other, and the indication of this. The analysis includes linking and comparing the values of the indicator to the target, and then judging the quality of performance according to this indicator, and linking this to the performance by considering the criteria and objectives related to that indicator or a set of indicators.

Also, from the objectives of the analysis, and based on the current indicator value and trend over the years, new target values are identified or the existing values are established.

Example of Analyzing the Results of KPI

KPI-P-2: Students' Evaluation of quality of learning experience in the program

Average of the overall rating of final year students for the quality of learning experience in the program on a five-point scale in an annual survey

Targeted value: 4.0

Results:

	Academic Year			
	1436/1437	1437/1438	1448/1439	1439/1440
Male		3.7	3.2	3.5
			3.8	
Female			2.4	3.1
	3.5	3.5		

Head Branch			3.3	3.6
	3.7	3.6		
Branches		2.7	3.2	
	3.6	3.8		

Last year's average result: 3.7 (male: 3.8, female: 3.5)

Last year's average result: 3.7 (Main campus: 3.6, Branches: 3.8)

Analysis:

The results indicate that the actual value of the indicator rose in the last year to the value of 3.8, but it did not reach the targeted value.

The value of the indicator in the Head site has risen from year to year, and it has also increased in the branches. However, it is still below the targeted value.

The value of the indicator for both males and females increases over time, and



its rate of increase is higher for females. Also, it is still below the targeted value. Investigating the status and trend of the indicator, it has been decided to fix the targeted value at 4.0

New Targeted Value: 4.0

1.6 Identification of Strengths and Opportunities for Improvement

The mechanism for identifying strengths is as follows:

- Comparing the indicator values in relation to the quantitative indicators with the index values in the distinguished programs that correspond to the program under study. The test associated with that indicator is considered a strength when the index values converge with those values in distinguished programs, and this must be supported by the availability of evidence and other evidence supporting this opinion.

Study the descriptive indicator (qualitative) and determine its significance with other evidence and evidence to judge the level of the criterion associated with that indicator, then it can be determined those criteria that reflect strengths.

On the other hand, the opportunities for improvement emanating from the analysis are identified as follows:

- Comparing the indicator values in relation to the quantitative indicators with the index values in the distinguished programs that correspond to the program under study, and the test associated with that indicator is considered one of the possible opportunities for improvement when the indicator values are far from those values in the distinguished programs, and in this case it is ensured that the available evidence and evidence does not It supports or is not available at all.

Study the descriptive indicator (qualitative) and determine its significance with other evidence and evidence to judge the level of the criterion associated with that indicator, then it can be determined those criteria that reflect the opportunities for improvement.

An example of a Strength point:

In one of the programs, performance indicators (KPI-P-14, KPI-P-15 & KPI-P-16) were calculated for three consecutive years, and the results are shown in Table 3. Evidence was also provided of the quality of scientific research activities, including the signing of two contracts for international cooperation research projects, several projects supported by the university, and two research supported by community institutions.

It is clear from the values of the indicators presented in the table, the high rates

of scientific publishing and the quotation ratios in the refereed journals from the research of faculty members. The table shows that the values of the indicators have achieved and exceeded the target, which confirms that the scientific research activities in the program are a visible strength point, and this supports the available evidence about scientific research projects mentioned in the previous paragraph.

Table 3: Results of Performance Indicators (KPI-P-14, KPI-P-15& KPI-P-16)

Indicator Code	The Indicator	First Year		Second Year		Third Year	
		Current Value	Target	Current Value	Target	Current Value	Target
KPI-P-14	The percentage of academic publication of faculty members	90%	100%	100%	100%	100%	100%
KPI-P-15	The published research rate for each faculty member	%150	%160	%170	%180	220%	%200
KPI-P-16	The rate of quotations in the refereed journals per faculty member	3.2	3	3.4	3	3.5	3.3

An example of an opportunity to improve:

In one theoretical program, the two performance indicators (KPI-P-11 & KPI-P-12) were calculated for three consecutive years, and the results are shown in Table 4.

Table 4: Results of the performance indicators (KPI-P-11 & KPI-P-12)

The Indicator Code	The Indicator	First Year		Second Year		Third Year	
		Current Value	Target	Current Value	Target	Current Value	Target
KPI-P-11	The ratio of students to faculty	1:30	1:22	1:32	1:22	1:31	1:22



KPI-P-12	The percentage of faculty distribution	Professor: 5% Associate Professor: 10% Assistant Professor: 85%	Professor: 20% Associate Professor: 30% Assistant Professor: 50%	Professor: 2.5% Associate Professor: 15% Assistant Professor: 82.5%	Professor: 20% Associate Professor: 30% Assistant Professor: 50%	Professor: 5% Associate Professor: 10% Assistant Professor: 85%	Professor: 20% Associate Professor: 30% Assistant Professor: 50%
----------	--	---	--	---	--	---	--

It is clear from the previous table that the ratio of students to faculty members is far from the international proportions in theoretical programs (1:22), and also the distance from the distribution of faculty members from the target, which was set from the distribution of that ratio in distinct and peer programs. It is also clear from the table that there is no tangible improvement in these percentages from year to year, and since there is no evidence of taking measures that promise the prospect of improvement in the near future, this point "The availability of a sufficient number of faculty members and the diversity of their academic ranks to suit the needs of the program" is considered an opportunity for improvement.

1.7 Formulating Improvement Actions and Implementation Plans

After identifying the points that have opportunities for improvement, as explained in the previous paragraph, recommendations are made to improve performance in these criteria, and accordingly an executive plan is drawn up that includes specific steps for treatment by following the following steps:

- 1- Careful and deep analysis of the opportunities for improvement (poor performance points) with the aim of identifying all the factors that affect the results associated with this test of inputs and practices.
- 2- Determine the reasons that led to the poor performance and the shortcomings in the test.
- 3- Suggesting improvement recommendations (treatment steps) necessary to address the defects in these criteria
- 4- Determine who is responsible for implementing those recommendations (steps) and the expected time period for implementation.

Example of the indicator (apparent completion rate):

After an appropriate period has passed on the measurement of the indicator (three consecutive measurements), the followers work to follow on it by preparing a

report on the status of the indicator, in order to evaluate the procedures and operations and make the required improvement. One of the examples of these reports is the following:

Sample of one of the detailed tables of the apparent completion rate indicator reports (KPI-P-04) in a student college program:

The Value of the Indicator Third Year	Target Third Year	The Value of the Indicator Second Year	Target Second Year	The Value of the Indicator First Year	Target First Year	Target After three Years
60%	80%	53%	65%	30%	50%	80%

The target was not achieved, as it reached 60% in the third year, while the target was 80%.

Reasons for not achieving the target:

After the study, it was found that the reasons are due to

1. The lack of desire of registered students in the programs in which they are registered.
2. The number of hours required to graduate in some programs is many compared to those in other institutions.
3. Lack of careful following-up and reviewing of ongoing programs; as in some programs there are some courses that students keep failing in and delay their graduation without finding adequate solutions.

Recommendations for improvement to achieve the target:

1. Provide appropriate procedures for the enrollment of female students in the majors they desire.
2. Reduce the number of hours required for graduation based on reliable and appropriate reference comparisons.
3. Review program reports and make appropriate improvements.
4. Implement a quality management system.

After that, executive steps are put in place to implement these recommendations within the executive program plan, so that the plan specifies those responsible for implementation and the date for completion of implementation.



II. Benchmarking

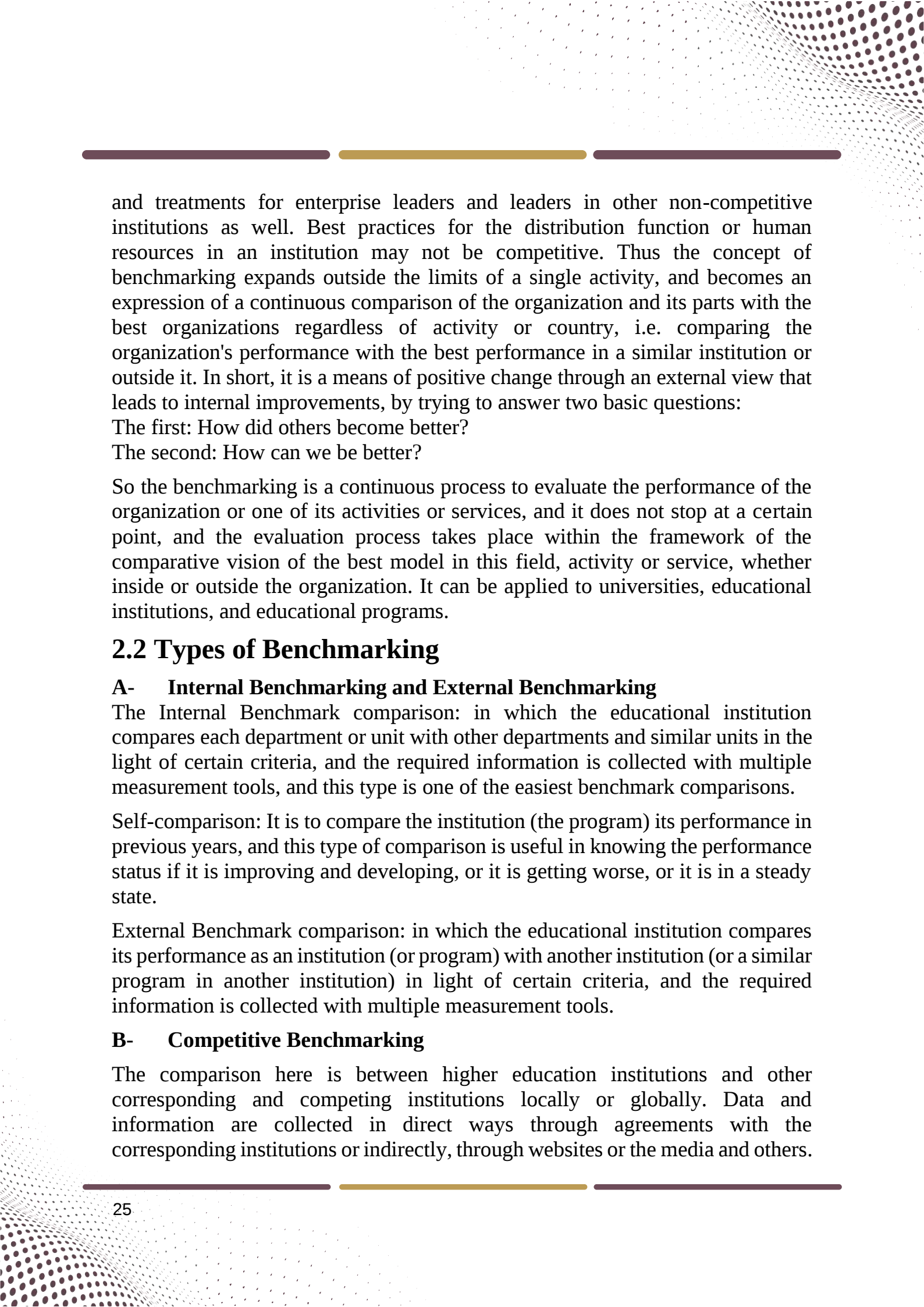
The benchmark comparison has historical roots dating back to 1810 when the English industrialist Francis Lowell studied the best methods used in British flour laboratories to reach the most successful applications in this field. In the aftermath of World War II, Japan was one of the first countries to apply a benchmark widely on the scale in the early 1950's. The first documented publications in the field of performance measures date back to 1938, when the International City Management Association (ICMA) published a field study on the performance measures of local services. The applications of this method were moved to the United States of America, where Xerox is considered the pioneer in this field in 1979 in response to the competitive crisis, and in the mid-seventies the urban Institute in cooperation with the International City Management Association (ICMA) issued two volumes: the first in 1974 , and the second in 1977 AD.

In the eighties, the concept of performance measures expanded to include ideas and principles of quality, customer satisfaction and management with goals. In the early nineties of the last century, the interest in evaluating government performance got renewed, which included benefiting in the public sector field from applying the benchmark comparison in the private sector.

2.1 Benchmarking Definition

Benchmarking is a systematic and continuous process to evaluate the performance of the organization or one of the aspects of this performance through comparison with a model, whether inside or outside this organization to identify the causes of the gap and work to address it and reach the best performance. The benchmarking can also be defined as one of the tools for evaluation, development, and improvement of performance by identifying the performance gap between the different units or divisions, and working to enhance the positive aspects that are distinguished, and identifying the negative aspects and working to avoid them, to achieve the best applications in performance.

Knowing the practices of other organizations and learning from them does not mean cloning them but rather adapting them to the circumstances of the interested organization on the one hand, and on the other hand the development of competing organizations continues during the time of the benchmarking process, and thus the gap continues despite improvement, so organizations should not focus only on keeping up with the development of others, but they should have a target to excel by having a future vision of being better. According to this vision, benchmarking means continuous research and application of new ideas, practices,



and treatments for enterprise leaders and leaders in other non-competitive institutions as well. Best practices for the distribution function or human resources in an institution may not be competitive. Thus the concept of benchmarking expands outside the limits of a single activity, and becomes an expression of a continuous comparison of the organization and its parts with the best organizations regardless of activity or country, i.e. comparing the organization's performance with the best performance in a similar institution or outside it. In short, it is a means of positive change through an external view that leads to internal improvements, by trying to answer two basic questions:

The first: How did others become better?

The second: How can we be better?

So the benchmarking is a continuous process to evaluate the performance of the organization or one of its activities or services, and it does not stop at a certain point, and the evaluation process takes place within the framework of the comparative vision of the best model in this field, activity or service, whether inside or outside the organization. It can be applied to universities, educational institutions, and educational programs.

2.2 Types of Benchmarking

A- Internal Benchmarking and External Benchmarking

The Internal Benchmark comparison: in which the educational institution compares each department or unit with other departments and similar units in the light of certain criteria, and the required information is collected with multiple measurement tools, and this type is one of the easiest benchmark comparisons.

Self-comparison: It is to compare the institution (the program) its performance in previous years, and this type of comparison is useful in knowing the performance status if it is improving and developing, or it is getting worse, or it is in a steady state.

External Benchmark comparison: in which the educational institution compares its performance as an institution (or program) with another institution (or a similar program in another institution) in light of certain criteria, and the required information is collected with multiple measurement tools.

B- Competitive Benchmarking

The comparison here is between higher education institutions and other corresponding and competing institutions locally or globally. Data and information are collected in direct ways through agreements with the corresponding institutions or indirectly, through websites or the media and others.



C- Operational Benchmarking

It is the one in which two organizations with the same activity are compared, such as if a university is compared with a university, a hospital with a hospital, a hotel with a hotel, or a primary school with another elementary school or between two countries.

D- Strategic Benchmarking

It examines successful strategies that have led to a competitive advantage and academic success, targeting the diagnosis of areas of strength and weakness of the comparator or who work in the activity itself as an important step in prioritizing areas for improvement and identifying new ideas that contribute to building a successful strategy.

E- Functional Benchmarking

It is for the educational institution to compare its performed jobs, such as teaching, scientific research, or community service, with the same jobs in the corresponding and distinguished institutions of higher education regionally or internationally, with a view to upgrading and improving these jobs. Included in this type is a comparison of common procedures among all types of institutions, such as commitment to attendance, leave, work system, wages, use of modern technologies, and other aspects.

F- Cooperative Benchmarking

It is conducted by a group of institutions in cooperation with each other, through which information and performance indicators are exchanged, and support and assistance are provided among them.

G- Financial Benchmarking

Comparison is conducted on the financial aspects, such as: a comparison of the budget and its disbursements in a sufficient manner, the effectiveness and methods of making use of the various sources of income, and ways to avoid financial waste.

H- Benchmarking for Optimum Performance

The best aspects are studied in an institution that is famous for a specific issue, where another institution or program wants to take advantage of its excellence in this field and follow its steps.

2.3 The Importance of Benchmarking

Because benchmarking is one of the methods that helps organizations to know



their performance level compared to the performance of its competitors, and because it is a method of continuous improvement, its importance is highlighted through what it achieves from the benefits that can be identified through the following points:

1. Rationalization of expenditures.
2. Providing continuous learning opportunities.
3. Provide an opportunity for the organization to move - internally and externally - towards better models.
4. Improving the creative and innovative capabilities of the team.
5. Providing cooperation opportunities between local organizations or units.
6. Enabling senior management to answer a set of questions.
7. Adopting an organizational culture aimed at solving problems.
8. Assisting the foundation in precisely defining the gap between its performance and that of the leading institutions in its field of work.
9. It helps to provide the appropriate climate, and enhances the desire for leadership of the institution and its employees to adopt a policy of change towards all that is better and new.
10. Help define critical processes, give them the necessary attention and priority in implementation, and actively contribute to developing individual and group creativity.
11. It actively contributes to increasing the chances of achieving additional benefits for the organization.
12. The external focus of the benchmarking method creates external competitive measures that necessarily increase the efficiency and effectiveness of internal performance quality measures and make them more competitive.

2.4 Reference Controls for Universities (Programs)

The university determines several controls for the selection of reference universities (programs), the most important of which are:

- That the corresponding universities fulfill the three main functions of the university, which are scientific research, education, and community service.
 - That the number of students at the university or in the program is close to the numbers at the university or the comparative program.
 - To offer the same major disciplines in the various branches of science (medical, applied - human).
 - To grant the same degrees.
 - Convergence in the number and efficiency of faculty members.
- 



2.5 Steps of Applying A Benchmarking Process

To specify a benchmark for reference comparison, the following questions must be answered:

Where do we stand compared to others?

What are the best universities to compare their activities with?

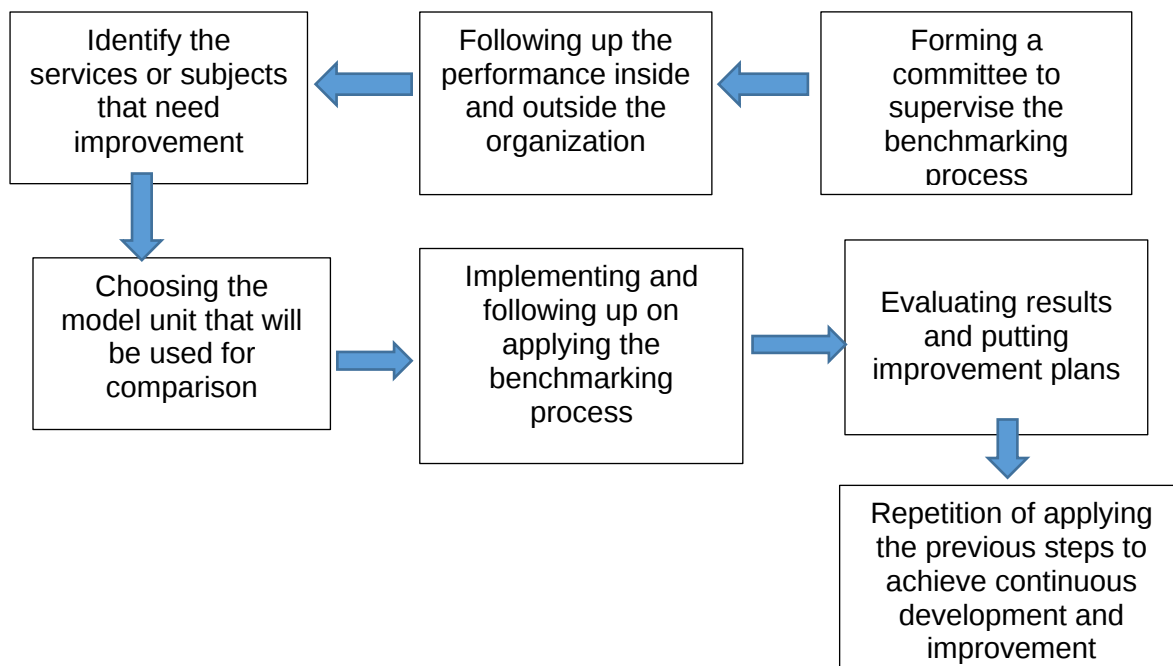
What areas of improvement are needed?

How can our university practices be applied?

How can we achieve more distinction than those universities?

Reference comparisons can be made as follows:

- Determine the reason why the educational institution would like to make a benchmarking process.
- Determine the areas you would like to compare.
- Identify the leading universities in the field, programs and similar aspects themselves.
- Study good practices for leading universities.
- Visiting universities with optimal performance to closely review these practices and obtain answers about them.
- Implement good practices and develop an implementation plan.
- Evaluating results and developing improvement plans.
- Repeat the previous steps to achieve continuous improvement and development.



2.6 Lessons Learned from Best Practices

In this case, the institution emulates some institutions or programs that have some distinct practices that the university or program finds useful for them to apply these practices, even if the activities of this institution are not the same, such as:

Creating a way to establish stable financial resources and grants at universities so that it provides stable financial support to the university in line with some of the world's prestigious universities, or comparing food services for patients in university hospitals with five-star hotels, etc.

The criteria for choosing a partner for comparison

- Similarities in the educational system.
- Similarity in mission and goals.
- Ability to provide data.

Relationship of performance indicators to benchmarking

There is an integration relationship between benchmarks and performance indicators because all benchmarks need to measure the matters that the institution needs to compare either internally or externally, and therefore, after defining the main goal of conducting the benchmark, the indicators that will be used for this purpose are selected, and the dates and time period that it will be measured. These indicators help the institution to determine whether its practices and outputs are consistent with similar institutions locally and globally, and whether they are developing and improving in performance from one year to the next.

Develop and implement a plan to remedy deficiencies

To improve and develop the selected processes, the preparation must be done innovatively and systematically, specifying the aspects that will be improved, the target, the time period and the responsible party.

Common mistakes when applying the benchmarking method

1. Insufficient contribution by senior management.
 2. The improper selection and preparation of work teams in charge of study or application.
 3. Insufficient technical support and implementation.
 4. Unsuitable targets, especially in the long run.
-



5. Unreality in determining what needs to be achieved or the expected time for implementation.
6. Incorrect or insufficient understanding of the information or method of application at the chosen university.
7. Absence or insufficiency of follow-up.

2.7 Tips for Ensuring a Successful Benchmarking

- Focusing on operations that are of paramount importance to the institution.
- Ensure that the benchmarking is used with strategic planning.
- Prepare to admit that you are not the best.
- Willingness to accept new ideas from unexpected sources.
- Commitment to provide the necessary resources and overcome resistance to change.

Honoring the successful comparison team.

Understand the benchmarking process.

- Encourage the comparison team to visit the institutions in the field and closely review best practices.
- Financial support appropriate to concluding reference comparison agreements.

Announcing the goals of the benchmarking project for all affiliates of the corporation.

Educational institutions that wish to persist and continue their work on the one hand, and on the other hand, to achieve excellence and creativity, must always improve their performance in comparison to the performance of competitors and the performance of leading institutions in their field of work.