

The Extent to Which Technical Colleges Are Committed To Applying Lean Management

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Abstract: The study aimed at identifying the extent of the technical colleges' commitment to the application of the lean management. The analytical descriptive method was used through a questionnaire randomly distributed to 289 of 1168 employees of the technical colleges in the Gaza Strip with return ratio of (79.2%) out of the sample study.

The results of the study showed that the technical colleges achieved a high level of lean management with a relative weight of 76.69%. The results of the study showed that there is a high level of flexible management (loss reduction, cost reduction, service improvement, customer satisfaction, maximization of competitiveness and profitability) in technical colleges in Gaza Strip. The field of waste reduction came first and with a relative weight of 79.56% In the second place came the field (responding to customer requirements) and a relative weight (79.14%), in the third place came the field (cost reduction) and a relative weight (75.68%), in the fourth place came the field (maximizing competitiveness and profitability) and relative weight (74.59%), in the fifth and final place came the field of (service improvement) and relative weight (74.52%). The results confirmed the existence of statistically significant differences in the application of the flexible management dimensions between technical colleges. The results showed that there were no differences in the application of the lean management according to the levels of experience except after the reduction of costs, where there were differences from the point of view of those with low experience.

The researchers suggested a number of recommendations, the most important of which is the need to increase the attention to the dimensions of achieving the lean management because of their role in the development and sustainability of technical education departments by enhancing and improving the operations in the technical colleges, especially in the difficult conditions experienced by Gaza Strip and the scarcity of resources. And the importance of urging decision makers in technical colleges to develop efficient management mechanisms and applications in terms of reducing waste, reducing costs, improving service, responding to customer requirements, and maximizing competitiveness and profitability, commensurate with the capabilities of these colleges.

Keywords: Lean Management, reducing waste, reducing costs, improving service, responding to customer requirements, maximizing competitiveness and profitability, technical colleges, Gaza Strip.

1. INTRODUCTION

The university administration is responsible for the development of education. If there is no university administration that is highly competent in the mechanisms and techniques of the age and responsible for the development of society and confronting the variables, it will be an obstacle to any fundamental development. Therefore, a successful and innovative university administration necessarily means a successful and developed society (Al-Khatib and Maiaqah, 2006). After the emergence of the term "lean management", research and studies were developed to identify the elements and activities necessary to achieve its concept as achieving significant gains for all stakeholders in any activity. Over and concerned institutions to improve the business climate and the development of appropriate training programs and attention to the concept of small working groups and project teams and other collective action mechanisms, so as opposed to heavy management (traditional) that rely on the owners experience.

As management continues to evolve, studies and literature emphasize that management will continue to be a vital component of all functions. The efficiency and effectiveness of an organization's performance is closely linked to the effectiveness of management, which requires upgrading its capabilities and providing the necessary care for them (Abu Naser et al., 2016). The role of the organization is to work to find solutions to existing problems, whether internal or external, today's organizations face changing and complex environmental conditions, which requires the need for institutions to have the capabilities and capabilities are capable of coping with the factors affecting the performance, and for the purpose of sustainability and growth must be available leadership in the organization is able to achieve its desired goals and continue to distinguish excellence and success by seeking to abandon the traditional concept of leadership and adopt new patterns, and this apparent interest in management has begun to take its natural status as an important element of work to achieve the goals of growth economic and social development.

2. PROBLEM STATEMENT

The problem of the study is the exceptional circumstances that Gaza Strip suffers from siege and wars, and the consequent increase in the number of universities and colleges in Gaza Strip, which in turn reflected the ability of universities and colleges in Gaza Strip. Continuing to keep pace with international universities and colleges in all fields. The subject of flexible management is one of the modern topics as it is one of the modern methods and techniques in management. It is an important mechanism through which organizations can achieve sustainable competitive advantage in a business environment characterized by this is what preoccupies the thinking of the departments of contemporary organizations that seek to improve performance in their operations. Hence, the researchers chose this topic as a starting point in the problem of study. This study seeks to test the variables the study of "Lean management" in the Palestinian environment, especially in technical colleges, and that the basic problem of research revolves around the "Lean management" and therefore the problem of the study can be expressed through the question of the following study:

Q1-: How satisfied are the lean management elements of technical colleges in Gaza Strip?

3. RESEARCH OBJECTIVES

The objective of the study is to reveal the lean management of technical colleges by achieving the following objectives:

1. Identify the reality of the lean management in the technical colleges in Gaza Strip.
2. Identify the arrangement of the dimensions of the lean management in technical colleges.
3. Identify the differences between technical colleges in Gaza Strip in applying the principles of lean management.
4. Identify the differences in the application of lean management according to the variable years of experience.
5. The conclusion of the conclusions and recommendations of the administrative leaders in the higher education institutions in general and the technical colleges in particular, may contribute to improving their performance and motivating them to promote the application of lean management, which contributes to the development of technical education.
6. Introduce and harness the most important issues for efficient management to improve the quality of technical education processes and reduce costs.

4. RESEARCH IMPORTANCE

1. The subject of the study can be counted from the new topics, where the concept of the recent lean management has emerged. Studies on the concept are still in its infancy and all seek to achieve the scientific addition, and this is one of the subjects that have the ability to deliver the organization to be creative and pioneering.
2. To enrich the Arab academic arena with new research studies and partnerships in the fields of administrative development.
3. The study focuses on the lean management of the technical colleges in Gaza Strip, in order to be appropriate and compatible with their needs, achieving their strategic objectives and serving other business organizations.
4. To examine the reality of efficient management in technical colleges, to monitor strengths and weaknesses, and to monitor aspects of their applications in these institutions.
5. The importance of this study stems from the fact that this study is considered one of the few if not the first studies conducted on technical colleges in Gaza Strip.

5. RESEARCH HYPOTHESIS

The study seeks to test the validity of the following hypotheses:

H01: There is a high level of flexible lean management in the technical colleges in Gaza Strip.

H02: There are statistically significant differences at the level of $\alpha \leq 0.05$ in the dimensions of the lean management depending on the college variable.

H03: There are statistically significant differences at the level of $\alpha \leq 0.05$ in the dimensions of the lean management according to the variable years of experience

6. RESEARCH VARIABLES

The lean management consists of (5) dimensions namely:

1. Reducing waste.
2. Reduce costs.

3. Improved service.
4. Respond to customer requirements.
5. Maximize competitiveness and profitability.

7. RESEARCH LIMITS AND SCOPE

1. **Objective Limit (academic):** The study was limited in its objective to study the extent to which the technical colleges adhere to the application of lean management
2. **Human Limitation:** This study is limited to the responses of the workers in the technical colleges in question.
3. **Institutional Limit:** This study is limited to the major technical colleges in the Gaza governorates (Palestine Technical College- Deir Al Balah, University College of Science and Technology, Gaza Community Training College, College of Intermediate Studies- Al-Azhar, University College of Applied Sciences, Al-Aqsa Society College).
4. **Spatial Limit:** The study was conducted in the State of Palestine and was limited to technical colleges in the Gaza Strip (Palestine Technical College- Deir Al Balah, University College of Science and Technology, GTC), College of Intermediate Studies- Al-Azhar, Al-Aqsa Society College).
5. **Time Limits:** This study was applied to collect the preliminary data on the technical colleges and conduct the statistical analyzes in the year 2018, so it represents the reality at this time.

8. RESEARCH TERMINOLOGY

- **Lean Management:** The ability of the organization to perform administrative performance, which is characterized by rapid response and the speed of adapting the work method in line with the requirements of change, a practice that focuses on values, flow, polarization, perfection, team work and its great benefits, Responding to challenges and opportunities, in order to achieve the best performance and best outcomes for customers with the total elimination of every activity or part that does not represent value added to work or customer (Al-Askar, 2017).

9. LITERATURE REVIEW

- Study of (El Talla et al., 2017) aimed to identify the reality of technical education in Palestine. The analytical descriptive method was used in the study. A questionnaire which consisted of 41 paragraphs was distributed randomly to the technical colleges in Gaza Strip. Random sample of (275) employees of these colleges were used, and the response rate was (74.5%). The results showed a high degree of approval for the dimensions of technical education with a relative weight of 76.07%. The ranking and relative weight was as follows: Technical education institutions: 79.51%, graduates of technical education 75.75%, Labor market and local community 72.96%. The researchers propose a number of recommendations, the most important of which is: the need to pay attention to technical education in line with the National Strategic Plan for Higher Education by moving towards technical education. The importance of offering special courses in all technical education programs in these colleges. The researchers urged more future studies that address the same variables as the current study and apply them to other sectors.
- Study of (El Talla et al., 2017) aimed to identify the creative environment and its relation to the lean management of the technical colleges operating in Gaza Strip. The analytical descriptive method was used through a questionnaire which was randomly distributed to 289 employees of the technical colleges in Gaza Strip with a total number of (1168) employees and a response rate equal to (79.2%) of the sample study. The results showed a high degree of approval for the dimensions of the creative environment with a relative weight of (75.19%). It also showed a high level of creative environment where the ranking and relative weight was as follows: Fluency (76.86%), Sensation of problems (74.89%), Flexibility (74.59%) and originality (74.41%). The results showed that the technical colleges achieved a high level of lean management with a relative weight of 76.69% and a high level of lean management. (79.56%), responding to customer requirements (79.14%), reducing costs (75.68%), maximizing competitiveness and profitability (74.59%), Improve service (74.52%), and the results showed a statistically significant difference relationship between the dimensions of the creative environment and management in lean technical colleges in Gaza Strip. The researchers suggested a number of recommendations, the most important of which is the need to enhance the dimensions of the creative environment by working to improve the abilities of the faculties in fluency, flexibility, originality, sensitivity to problems and the importance of increasing attention to the dimensions of achieving the lean management because of their role in the development of technical education departments and sustainability. Develop lean management mechanisms and applications in terms of reducing waste, reducing costs, improving service,

responding to customer requirements, and maximizing competitiveness and profitability, commensurate with the capabilities of these colleges.

- Study of (Abu Naser et al., 2017) aimed to identify the technical education and its role in promoting entrepreneurship in Gaza Strip. The analytical descriptive method was used in the study. A questionnaire was composed of (41) items and distributed randomly by the technical colleges in Gaza Strip using stratified random sample of (275) employees from the mentioned colleges, and the response rate was (74.5%). The results showed a high degree of approval for the dimensions of technical education with a relative weight of 76.07%. The ranking and relative weights were as follows: Technical education institutions: 79.51%, graduates of technical education 75.75% Labor market and local community 72.96%. The results of the study showed that the technical colleges achieved a high level of promotion of entrepreneurship with a relative weight of 73.45%. Where the ranking and relative weights were as follows: competitive assault (76.65%), creative orientation (74.96%), preparedness (74.07%) and risk (68.39%). The results also confirmed a statistically significant relationship between the dimensions of technical education and the promotion of entrepreneurship in technical colleges in Gaza Strip. The results also confirmed a statistically significant impact of technical education on the promotion of entrepreneurship in the technical colleges in Gaza Strip. The researchers proposed a number of recommendations, the most important: the need to go to technical education because of its role in the promotion of entrepreneurship, the importance of linking technical education and promoting entrepreneurship to the Palestinian society in general and the Gaza Strip in particular, the need to pay attention to technical education in line with the National Strategic Plan for Higher Education by moving towards technical education, and the importance of urging decision-makers in technical colleges to promote interest in leadership and to put their own courses in all technical education programs in these colleges. The researchers urged further studies of the same variables as the current study of entrepreneurship and their application to other sectors.
- Study of (Abu Naser et al., 2017) aimed to identify the social networks and their role in achieving the effectiveness of electronic marketing for technical colleges in the Gaza Strip, which included variables of social networks and their role in electronic marketing, as well as the recognition of the existence of differences of statistical significance in the attitudes of respondents towards the variables of the study, and using a descriptive analytical approach in the study. A questionnaire of 50 items was randomly distributed among the technical colleges in Gaza Strip. The sample of the study was composed of (275) employees of these colleges. The response rate was 74.5%. The results showed a high degree of approval for the dimensions of social networks and a relative weight (74.15%). There is a high level of social networking areas (site management (74.91%), content of the site: (73.38%)). The technical colleges achieved a high level of use of electronic marketing, where the total relative weight (70.24%). There is a high level of e-marketing (Electronic advertising (71.75%), electronic promotion (74.75%), news groups (66.03%), and communication with the audience (student) (68.73%)). There is a statistically significant relationship between the organization's smart dimensions and sustainability in the technical colleges in Gaza Strip. The results also confirmed that there is a statistically significant impact of social networks in e-marketing in the technical colleges in Gaza Strip. The researchers proposed a number of recommendations, the most important of which are: Adopting dealing with the various social media sites as a reality on the Palestinian and Arab technical colleges, using them in accordance with the objectives of the technical colleges. The need to direct marketing through social networks and the exploitation of this network in marketing through them, the follow-up of the pages of the colleges and open the door of dialogue, communication, and respond to all inquiries. Technical colleges should put electronic marketing in their strategic marketing plan.
- Study of (El Talla et al., 2017) aimed at identify technical colleges as smart organizations and their relation to sustainability. The variables of smart organizations included: "Strategic vision, culture of merit and excellence, incentive system" and its relation to sustainability, which included three main dimensions (innovation, processes, and environmental aspects of the community). The questionnaire was composed of (39) items, which were randomly distributed to the technical colleges in the Gaza Strip. The sample of the study consisted of 289 employees from the mentioned colleges. The response rate was (79.2%). The results showed a high degree of approval for the dimensions of the smart organization and relative weight (71.42%) according to the perspective of the employees of the technical colleges in the Gaza Strip. Where the field (culture of merit and skill) ranked first and with relative weight (73.76%), followed by strategic vision and relative weight (72.62%), and finally came the area (incentive program) in the third and last place and a relative weight (67.91%). The results of the study showed that the technical colleges achieved a level high in sustainability in its operations with total relative weight (73.33%). Where the field (environmental aspects of society) came first and with relative weight (73.97%), followed by innovation and relative weight (73.10%), and finally came the field (operations)

ranked third and last and relative weight (72.92%). The results confirmed a statistically significant relationship between the organization's smart dimensions and sustainability in the technical colleges in the Gaza Strip. The researchers propose a number of recommendations, the most important of which are: to enhance the dimensions of the smart organization in the technical colleges by improving the incentive program, developing the strategic vision and then supporting the culture of merit and skill. And increasing attention to the dimensions of achieving sustainability because of their role in the development and sustainability of technical education through the promotion and improvement of operations in technical colleges. He urged senior management and decision-makers to work in technical colleges to create, innovate and reward and support their creators.

- Study of (Abu Obeid, 2016) the aim of this study is to measure and promote awareness and understanding of the principle of Lean management in the Palestinian construction industry. The study was based on the descriptive and analytical approach and the method of field study, where the previous studies and researches on this subject were reviewed, and then a survey was conducted targeting construction companies in the West Bank. The questionnaire was designed and distributed to a sample of 153 contracting companies. The results showed that there is agreement on the positive impact of adopting new management methods and the successful implementation of management. The results also indicate that there is agreement on factors that support the success of the application of Lean management related to human factors such as positive employee behavior, experience, information, etc., in addition to factors specific to the institution such as the culture of the institution, training, coordination, communication and others. At the end of the study, all these factors were linked to a framework that illustrates them and shows their impact on the successful implementation of Lean management. In addition to linking these factors with a mathematical relationship that enables companies to predict the success of the application of Lean management if they are able to measure these different factors. The study recommended the need to benefit from and learn from previous projects in order to assess and determine the strengths and weaknesses of these factors in order to develop them. The impact of this development should be evaluated by reviewing performance indicators. The study also recommended that landlords establish mandatory contract terms that support the application of the principles of Lean management.
- Study of (Ben Warth and Jabah 2016) aimed at shedding light on the lean management style and reviewed the various forms of waste that the institution may face during the production process. The descriptive analytical method was used, and through the applied study on a sample of Algerian pharmaceutical institutions. Using the questionnaire tool, the extent to which the Lean management method was applied was measured. The study found that these institutions are represented in senior management and are committed to providing all the necessary resources for applying this method. The training policy adopted is consistent to some extent with the basic requirements. However, the prevailing culture in these institutions, especially the lack of spirit of cooperation between Management and workers remain a major obstacle to the application of this administrative philosophy.
- Study of (Shlash and Hasnawi, 2014) aims to provide a modern theoretical framework for the most prominent of what the authors and researchers on the variables of research as well as the analytical framework of the views of a sample selected within the research community included administrative leadership in the laboratory, and in light of the problem of research was answered a number of questions What are the dimensions of production? Are these dimensions available in the company investigated? Is there a correlation between the thin production dimensions and the operational performance dimensions? What is the level of the effect of lean production on the performance of operations? Using a set of statistical tools. The research concluded a number of conclusions, the most important of which: The validity of the main hypotheses and sub-research related to the existence of a correlation relationship and impact between the search variables. The research included a number of recommendations, the most important of which are: To encourage the adoption of the philosophy of soft production by taking advantage of the Japanese experience in this field. Japanese philosophy played a major role in the application of the production system, thus achieving a competitive advantage for Japanese products.

Comment on previous studies

However, in light of the transformations and changes in all fields and the general orientation set by the Palestinian Ministry of Higher Education towards technical education, the study sought to study the extent to which the technical colleges are committed to implementing the lean Palestinian administration.

In terms of the objective of the study: The research trends of previous studies have varied, such as Abu Obeid 2016, which aims to measure and enhance awareness and understanding of the principle of Lean management in the Palestinian construction industry and to verify the main factors supporting the implementation of these principles, Human factors and factors specific to the institution and contracts, in addition to the identification of indicators of

success of its application. (Shlash and Hasnawi, 2014), which aims to provide a modern theoretical framework for the most prominent of the authors and researchers on the variables of research as well as the analytical framework of the views of a sample selected within the research community included administrative leadership in the laboratory.

In addition, most of the studies focus on the perspective of senior and middle management, economic institutions and health institutions, as well as human resource managers. The current study examined the dimensions of the lean management: reducing waste, reducing costs, improving service, responding to customer requirements, Competitiveness and profitability).

In terms of the variables of the study: Most studies focused on factors that support the success of the application of lean management related to human factors such as the employee's positive behavior and experience, information and others, in addition to factors specific to the institution, such as the culture of the institution, training and coordination and communication and others.

The current study examined the dimensions of the lean management: reducing waste, reducing costs, improving service, responding to customer requirements, maximizing competitiveness and profitability. The current study differed from previous Arab and foreign studies in terms of the sectors studied, analysis, and the nature of the sample studied.

10. THE THEORETICAL FRAMEWORK OF THE STUDY

First- Lean Management

When the term "lean management" came to light, research and studies were developed to identify the elements and activities necessary to achieve its concept as achieving significant gains for all stakeholders in any activity. The perception of employees as the main partner in the development and continuous improvement was changed. And the concept of (workers with knowledge), that is, multi-skilled, educated, specialized and experienced, able to study and understand the current reality in each activity and which is capable of solving its problems and even developing it for the better. This is in contrast to the traditional (heavy) management, which relies on the experienced ones, as well as new administrative concepts and values that are difficult to enumerate in an article.

Lean management objectives

The aim of "Lean Management" aims to:

- Access to zero loss in all areas such as faults, delays, number of defective product and inventory at all stages of supply, personnel accidents, equipment accidents, personnel effort, and any other factors affecting the production process.
- Reduced service delivery time and responsiveness to customer requests.
- Increase productivity, improve quality and maximize profitability.
- Maximize existing competitiveness and strive to build new competitive capabilities.
- Reduction of waste due to overproduction, waiting periods (time loss), repetition of transport and handling, poorly planned operation, unnecessary inventory, unnecessary movements of personnel and equipment, defects in product, personnel accidents and equipment. Etc.

The concept of "lean management" is based on institutional change that includes many practices and tools that contribute to making activities simple, fast, and streamlined, such as:

1. Improve the working environment.
2. Improving the psychological work environment (labor relations and workers).
3. Production is one unit system rather than quantitative production.
4. Implement team work systems (teams of individuals with multiple talents and skills) for quality departments, improvement projects and problem solving.
5. Employing techniques that reduce error.
6. Employ visual surveillance techniques in all available activities.
7. Comprehensive Productive Maintenance.
8. Build quality at the upstream, using advanced technologies.
9. Reduce the time and cost of maintenance work.
10. Apply the concepts of the movement economy to improve the performance of individuals.
11. Investing in knowledge.
12. Encourage creativity and innovation.

13. Transparency and avoid ambiguity.
14. Fight the routine.
15. Maximize the concept of value added in streamlining business processes, where any administrative action that has no added value for the business or the client is excluded.

The researchers believe that no organization (governmental or non-governmental, large or small, profitable or non-profit) will be able to keep abreast of the latest developments in the world of technology and information and globalization of balanced performance and achieve quality and achieve the objectives of growth and competition only by eliminating (heavy management) The bureaucracy and its organizational, procedural and other obstacles, and the transformation to the lean management with its modern concepts, advanced methods and absolute transparency, and its holistic approach, which enables the assimilation of new variables and effective contribution to change, development and comprehensive sustainable development in my mind Lean management.

11. FIELD STUDY

First- Methodology of the study:

This study is based on the analytical descriptive approach to describe and describe the phenomenon to be studied as it exists. In fact, researchers in this approach are considering the study of tools, phenomena and practices existing and available for study and measurement as they are, without the intervention of the researchers in their course, and researchers can interact with them and describe them and analyze them scientifically and objectively.

The study relies on two basic types of data:

1. **Initial Data:** The study was carried out in the field by distributing questionnaires to study the vocabulary of the study and to collect and compile the necessary information in the subject of the study, and then unloading and analyzing it using the statistical program and using the appropriate statistical SPSS tests in order to arrive at indications of value and indicators that support the subject of the study.
Some interviews conducted by researchers with stakeholders to obtain some unedited data in writing and to clarify some views.
2. **Secondary data:** through the review of books, periodicals, special publications, scientific and professional journals related to the subject of the study, and any references contribute to enrich the study in a scientific way, and the researchers through the use of secondary sources in the study to identify the foundations and scientific methods sound in writing studies, A general overview of the latest developments that took place in the field of study.

Second- Study Population:

The study population consists of all the staff of the technical colleges in Gaza Strip (Palestine Technical College-Deir Al Balah, University College of Science and Technology, Gaza Community Training College, Al-Azhar College of Applied Studies, College of Intermediate Studies- Al-Azhar) of the (1168) employees of the technical colleges under study as follows:

Table 1: illustrates the study population

The College	Number Of Employees	The Ratio%
Palestine Technical College	193	%16.52
University College of Science and Technology	204	%17.47
Gaza Training Community College	119	%10.19
College of Intermediate Studies- Al-Azhar	184	%15.75
College of Applied Sciences	335	%28.68
Al-Aqsa Society College	133	%11.39
Total	1168	%100

Source: Prepared by researchers by reference to the statistical book and the annual statistical guide for Palestinian higher education institutions, Ministry of Education and Higher Education, (2016).

Third- The study sample:

1. A survey sample was used by the researchers to verify the validity and stability of these tools and the sample size reached 32 workers.

2. The sample of the study was random sample and consisted of (289) employees of the mentioned colleges. The response rate was 79.2%.

Table 2: Distribution of respondents from the sample of the study

Personal Data	Category	The Number	The Ratio%
Gender	Male	177	%77.3
	Female	52	%22.7
	Total	229	%100
Age	Less Than 30 Years	36	%15.7
	30 And Under 40 Years	136	%59.3
	40 And Less Than 50 Years	37	%16.15
	50 Years And Above	20	%08.7
	Total	229	%100
Scientific Qualification	Doctorate	28	%12.22
	Master's Degree	107	%46.7
	Bachelor's Degree	80	%34.9
	Diploma	14	%6.11
	Total	229	%100
Number Of Years Of Service	Less Than 5 Years	18	%7.86
	5-10 Years	80	%34.9
	10 Years And Over	131	%57.2
	Total	229	%100
Career Level	Dean / Vice	5	%2.18
	Head of Academic Section	19	%8.44
	Head of Administrative Section	23	%10.04
	The Administrative	82	%35.80
	Full Time Lecturer	74	%32.3
	Part time lecturer	26	%11.35
	Total	229	%100
The college	Palestine Technical College	30	%13
	University College of Science and Technology	22	%10
	Gaza Training Community College	31	%13.5
	College of Intermediate Studies- Al-Azhar	48	%21
	College of Applied Sciences	46	%20
	Al-Aqsa Society College	52	%22.5
	Total	229	%100

Table 2 shows that: That is what counts (77.3%) of the sample of the study are male, and that the proportion (22.7%) of females, and that is what counts (15.7%) Of the respondents whose average age is less than 30 years, and (59.3%) Aged between 30 and under 40 years where the highest category, and that percentage (16.15%) are between the ages of 40 and less than 50 years, and that is what they are (08.7%) of those aged 50 and above. This indicates that the technical colleges in the Gaza Strip are new colleges and that they attract the youth group to work and that they support the young people.

As for the scientific qualification, what is the percentage (12.22%) Of the holders of a doctorate, and that percentage (46.7%) of the holders of the qualification of the Master's degree where the highest category, and what the

proportion (34.9%) have a bachelor's degree, and that percentage (6.11%) are those who hold a scientific qualification (diploma) because the nature of their work is administrative and does not require higher qualifications. As for the variable number of years of service, the category has less than 5 years (7.86%) where the lowest category was. The category has got 5-10 Years to (34.9%), and the category of 10 years and over (57.2%) Where the highest category and this indicates the recent technical colleges in the Gaza Strip colleges are based on community service and there is still a turnout by graduates to join them and also confirms the pursuit of these colleges to attract the largest number of qualified able to achieve the objectives of technical colleges.

As for the career level, the category of Dean / Vice was (2.18%), Academic Head of Section (8.44%), Head of Administrative Section (10.04%) and Administrative Category (35.80%). On the keenness of technical colleges to attract administrators able to promote their colleges and serve the students and facilitate them, and the category of full-time lecturer in the second place and by (32.3%) and this indicates the keenness of technical colleges to provide a scientific atmosphere specialized in the presence of cadres full-time academic ability to develop Students and give them a sufficient amount of academic sciences systematically and correctly, as came the category of lecturer (11.35%) as the technical colleges still need more specialists in different fields.

As for the college variable, Al-Aqsa Society College came in first place with a percentage of (22.5%) as it is a government college. Among the general orientations of the Ministry of Education is he orientation towards technical education. Therefore, there is a keenness from the Ministry to provide government colleges with the needs they need. The Faculty of Intermediate Studies - Al Azhar ranked second by (21%), the University College of Applied Sciences came third (20%), Followed by the Gaza Community Training Society, followed by the fourth (13.5%), then the Technical College of Palestine, which received a percentage (13%), thus, the University College of Science and Technology ranked last (10%).

Fourthly- Study tool

Since the nature of the hypotheses and the variables included in them are the ones that control the choice of the appropriate tool, accordingly, the researchers have prepared a measure for that study commensurate with its objectives and hypotheses. The process of designing and preparing the study scale has gone through several stages and steps:

1. See the literature of the creative environment, and previous studies on the subject of the current study.
2. Collect and define scale paragraphs.
3. Formulation of the standard expressions according to the study sample.
4. Set the meter instructions.
5. How to correct the meter.
6. Conduct a study of stability and honesty of the scale.

How to correct the meter:

The five-dimensional Likert scale was used to measure respondents' responses to the questionnaire sections according to the following table:

Table 3: The degrees of the five-dimensional Likert scale

Response	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Class	1	2	3	4	5

Validate the measure: The researchers calculated the validity of the meter in the following ways:

1. **Virtual honesty:** The researchers verified the authenticity of the tool ostensibly by presenting it to a group of PhD holders in Business Administration (8). The apparent honesty indicates the general appearance of the test in terms of its relevance to the subjects, the relevance of the phrase to the field, and the clarity of the wording and instructions.
2. **Internal consistency:** The researchers calculated the validity of the internal consistency of the scale by finding the correlation coefficients between each field and the total score of the scale. The researchers conducted honesty and persistence on a sample of 32 employees by finding correlation coefficients for each paragraph in the field to which they belong. The following tables:

Table 4: Honesty coefficients for each paragraph with the total score of its field in the Lean management scale

Reducing waste	Reducing costs	Improving	Responding to	Maximizing
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						service			customer requirements			competitiveness and profitability		
Paragraph Number	Honesty Coefficient	Level Of Significance	Paragraph Number	Honesty Coefficient	Level Of Significance	Paragraph Number	Honesty Coefficient	Level Of Significance	Paragraph Number	Honesty Coefficient	Level Of Significance	Paragraph Number	Honesty Coefficient	Level Of Significance
1	0.790	0.01	1	0.755	0.01	1	0.885	0.01	1	0.731	0.01	1	0.838	0.01
2	0.936	0.01	2	0.832	0.01	2	0.887	0.01	2	0.760	0.01	2	0.849	0.01
3	0.805	0.01	3	0.788	0.01	3	0.818	0.01	3	0.818	0.01	3	0.843	0.01
4	0.814	0.01	4	0.798	0.01	4	0.822	0.01	4	0.791	0.01	4	0.872	0.01

Stability of the scale:

The concept of stability means the ability of the test to give the same grades or values to the same individual or individuals if the measurement process is repeated. To ensure the stability of the scale, the researchers used the following methods:

1. **The method of split-half:** by calculating the correlation coefficient between the individual questions and marital questions, and obtained the stability coefficients shown in the following table.

Table 5: Stability coefficient of Lean management scale

No.	Field	Number of Item	Correlation Coefficient Before Adjustment	Correlation Coefficient After Adjustment	Level Of Significance
1.	Reducing waste	4	0.774	0.872	Sig. at 0.01
2.	Reducing costs	4	0.729	0.843	Sig. at 0.01
3.	Improving service	4	0.748	0.856	Sig. at 0.01
4.	Responding to customer requirements	4	0.658	0.794	Sig. at 0.01
5.	Maximizing competitiveness and profitability	4	0.750	0.857	Sig. at 0.01

From the previous table, it is clear that the stability coefficients in all midterm segments were high, indicating that the questionnaire has a high degree of stability.

2. **Alpha Cronbach's coefficient of persistence:** The researchers performed alpha-cronbach's persistence coefficient between the terms of each field separately, as shown in the following table:

Table 6: Shows the coefficients of alpha-kronbach stability for each dimension of the Lean management scale

No.	Field	Coefficient Of Alpha-Cronbach Stability
1.	Reducing waste	0.851
2.	Reducing costs	0.804
3.	Improving service	0.870
4.	Responding to customer requirements	0.779
5.	Maximizing competitiveness and profitability	0.869

The correlation coefficient (0.919), which is a high stability coefficient, indicates the strength and validity of the scale. The researchers noted that the coefficients of the coefficients Pearson's correlations correlate with the results of alpha-cronbach's persistence coefficient.

Fifth-Statistical Methods:

The computer was used in the statistical processing, especially the statistical packages program (SPSS), where all the data obtained by the researcher and then the results were extracted through the scientific equations necessary for this and the most important used in this study:

1. Averages, frequencies, standard deviations and percentages.
2. Spearman Brown's correlation coefficient for the equal half - division, and the Cronbach alpha factor to determine the stability of the resolution.
3. Pearson correlation coefficient to measure the relationship between variables.
4. Test T test for differences between averages.
5. One way Anova test

Test the study hypotheses

To evaluate the study hypotheses and where the five- Likert was used in the preparation of the study instrument, the study adopted the following table to judge the trend when using the pentagram.

Table 7: Scale of measurements used in this study

Method The Level	SMA	Relative weight%
Very Low	Less than (1.80)	Less than 36.00%
Low	From (1.80): (2.59)	From 36.00: 51.90%
Medium	From (2.60): (3.39)	From 52.00: 67.90%
High	From (3.40): (4.19)	From 68.00: 83.90%
Very High	Greater than (4.20)	Greater than 84.00%

This indicates that the averages of less than 1.80 indicate a very low degree in the elements of the field. The averages of (1.80: 2.59) indicate a low degree of availability of field elements, 3.39: 2.60) indicate that there is a medium degree in the elements of the field, and the averages ranging from (4.19: 3.40) indicate that there is a large degree in the elements of the field. More than (4.20) on the scale used in the study shown in the previous table.

The first hypothesis test: There is a high level of flexible management in the technical colleges in the Gaza Strip.

To test this hypothesis, the researchers resorted to frequencies, averages, standard deviation, percentages, order and value of "T". The results were as shown in the following tables:

Table 8: Frequency, Mean, Standard Deviation, Percentages, Order and Value of "T" of Responses of Sample Members in the Field of Waste Reduction

No.	Item	Arithmetic Mean	Standard Deviation	"T" Value	Relative Weight%	Item Order	Morality P- Value
1.	The College is interested in reducing the waste of its resources	4.14	0.854	20.276	82.80%	1	0.000
2.	The College relies on administrative methods to reduce waste in its operations	3.95	0.911	15.734	79.00%	3	0.000
3.	The college administration publishes a culture of eliminating waste in its activities	3.83	0.920	13.598	76.60%	4	0.000
4.	The College is committed to spending according to the budget line items	3.99	0.908	16.520	79.80%	2	0.000
Total Domain		3.9778	0.75854	19.507	79.56%		0.000

The Tabular value of "T" is the at the level of freedom (228) and at the level of significance (0.05) = 1.65

The tabular value of "T" is at the degree of freedom (228) and at the level of significance (0.01) = 2.34

Table (8) shows that the value of the calculated T is greater than the value of T in all the paragraphs of the waste reduction field. Thus, there is a statistical significance of the relative weight of these paragraphs. (82.80%), while

the third paragraph (the management of the college published the culture of removing waste in its activities) ranked last with a relative weight (76.60%). The total score for the field of reducing the waste has a relative weight of (79.56%), which is high, ie, there is a high level of waste reduction in the technical colleges in question.

The researchers attribute this finding to the difficult and extremely complex conditions faced by the technical colleges in the Gaza Strip. Technical colleges must maintain competitive advantage without compromising material and technical resources, so as to increase attention to reducing waste of resources.

This result is consistent with Shlash and Hasnawi (2014), which recommended the adoption of the philosophy of production. Japanese philosophy played a major role in the application of the lean production system, thus achieving a competitive advantage for Japanese products.

Table 9: Frequency, Mean, Standard Deviation, Percentages, Order and Value of "T" of Sample Responses in Cost Reduction

No.	Item	Arithmetic Mean	Standard Deviation	"T" Value	Relative Weight%	Item Order	Morality P- Value
1.	Our college costs are low compared to the competitive colleges	3.81	1.039	11.796	76.20%	2	0.000
2.	The college relies on contracts and the hourly teaching system to reduce costs	3.79	1.090	10.933	75.80%	3	0.000
3.	The College is constantly reducing maintenance costs	3.82	0.914	13.550	76.40%	1	0.000
4.	The College uses innovative tools to reduce costs in order to achieve target cost	3.71	0.872	12.384	74.20%	4	0.000
Total Domain		3.7840	0.73998	15.998	75.68%		0.000

The tabular value of "T" is at the level of freedom (228) and at the level of significance (0.05) = 1.65

The tabular value of "T" is at the degree of freedom (228) and at the level of significance (0.01) = 2.34

Table (9) shows that the value of the calculated T is greater than the value of T in all the paragraphs of the cost reduction field. Thus, there is a statistical significance of the relative weight of these paragraphs. To reduce the cost of maintenance operations and continuously) to the first place with a relative weight of (76.40%), while the fourth paragraph (the College uses innovative tools to reduce costs in order to reach the target cost) in the last place with relative weight (74.20%), the overall degree of cost reduction has a relative weight (75.68%) which is high, ie, there is a high level of cost reduction in the technical colleges under study.

The researchers attribute this finding to the very difficult circumstances faced by the technical colleges in the Gaza Strip. The College is working to reduce the costs of maintenance operations and constantly by relying on temporary contracts policy in employment under conditions that do not interfere with the quality of education in other countries.

Table 10: Frequency, Mean, Standard Deviation, Percentages, Order and Value of "T" of Sample Responses in Service Improvement

No.	Item	Arithmetic Mean	Standard Deviation	"T" Value	Relative Weight%	Item Order	Morality P- Value
1.	The College adopts new methodological methods to improve its activities and operations	3.89	0.866	15.523	77.80%	1	0.000
2.	The college adopts performance evaluation results as a basis for continuous improvement	3.72	0.975	11.213	74.40%	2	0.000
3.	The College constantly improves the skill and knowledge of its staff	3.64	1.009	9.604	72.80%	3	0.000
4.	The College seeks to identify the	3.64	0.969	10.003	72.80%	4	0.000

	causes of problems for continuous improvement						
Total Domain		3.7262	0.86324	12.703	74.52%		0.000

The tabular value of "T" is at the level of freedom (228) and at the level of significance (0.05) = 1.65

The tabular value of "T" is at the degree of freedom (228) and at the level of significance (0.01) = 2.34

Table (10) shows that the T value of the related samples is greater than the value of T in all the paragraphs of the service improvement field. Thus, there is a statistical significance of the relative weight of these paragraphs. The first paragraph New methodological methods to improve its activities and processes) ranked first with a relative weight of (77.80%), while the fourth paragraph (the college seeks to identify the causes of problems for continuous improvement) in the last place with a relative weight (72.80%), the overall degree of service improvement has a relative weight of (74.52%) which is high, ie, there is a high level of service improvement in the technical colleges under study.

The researchers attributed this result to the high competitiveness among technical colleges in the Gaza Strip, noting the increasing number of these colleges, which called for the administration of the colleges to seek to improve its services to attract as many students as possible. To improve its activities and operations, based on performance evaluation results as a basis for continuous improvement and quality.

This finding is consistent with the study of (Al-Azzawi and Nasir, 2011), which concluded that banks honor creative employees on a regular and continuous basis and that bank employees enjoy a high degree of creativity, although encouraging banks to innovate is limited.

Table 11: Frequency, Mean, Standard Deviation, Percentages, Order, and Value of "T" for Respondents' Response to Customer Requirements

No.	Item	Arithmetic Mean	Standard Deviation	"T" Value	Relative Weight%	Item Order	Morality P- Value
1.	The College offers educational programs that are suitable for students' aspirations and the job market.	4.03	0.831	18.727	80.60%	1	0.000
2.	The college depends on setting a target price for the school hours accepted by students.	3.87	1.000	12.947	77.40%	4	0.000
3.	The college offers a high quality creative learning process.	3.91	0.915	15.047	78.20%	3	0.000
4.	Study plans focus on developing students' practical skills	4.00	0.863	17.577	80.00%	2	0.000
Total Domain		3.9569	0.66582	21.700	79.14%		0.000

The tabular value of "T" is at the level of freedom (228) and at the level of significance (0.05) = 1.65

The tabular value of "T" is at the degree of freedom (228) and at the level of significance (0.01) = 2.34

Table (11) shows that the value of the calculated T is greater than the T value in all the paragraphs of the response to the requirements of the customers. Thus, there is a statistical significance of the relative weight of these paragraphs. The College has educational programs that are suitable for students' aspirations and the labor market (80.60%), while the second paragraph (the college depends on setting the price of the school hour target is accepted by students) in the last place with a relative weight (77.40%), the overall degree of responsiveness to customers' requirements has received relative weight (79.14%) which is high, ie, there is a high level of responsiveness to customer requirements in the technical colleges under study.

The researchers attribute this result to the very difficult circumstances faced by the technical colleges in the Gaza Strip, the multiple needs of the clients and the beneficiaries of the labor market and the Federation of Industries, so these colleges are introducing new programs to meet these needs on an ongoing basis. Work and the management of these colleges should focus on the study plans to develop the students' practical skills.

This result is consistent with the Abu Obeid (2016) study, which recommended the need to benefit from and learn from previous projects in order to assess and determine the strengths and weaknesses of these factors in order to develop them, and evaluate the impact of this development by reviewing performance indicators.

Table 12: Frequency, Mean, Standard Deviation, Percentages, Order, and Value of "T" for Sample Responses in the Field of Maximizing Competitiveness and Profitability

No.	Item	Arithmetic Mean	Standard Deviation	"T" Value	Relative Weight%	Item Order	Morality P- Value
1.	There is a steady increase in the satisfaction of students and beneficiaries with the services provided by the College	3.80	0.862	13.981	76.00%	2	0.000
2.	There is an increase in the number of students enrolled in the college	3.68	0.953	10.707	73.60%	3	0.000
3.	There is an increase in college graduates' employment opportunities for other colleges	3.81	0.942	12.934	76.20%	1	0.000
4.	There is a distinction in the results of internal and external self-assessment	3.63	0.899	10.631	72.60%	4	0.000
Total Domain		3.7295	0.75547	14.581	74.59%		0.000

The tabular value of "T" is at the level of freedom (228) and at the level of significance (0.05) = 1.65

The tabular value of "T" is at the degree of freedom (228) and at the level of significance (0.01) = 2.34

Table (12) shows that the value of the calculated T is greater than the T value in all the paragraphs for the field of maximizing competitiveness and profitability. Thus, the relative weight of these paragraphs is statistically significant. There is an increase in the chances of college graduates in employment for other colleges) ranked first with a relative weight of (76.20%), while the fourth paragraph (there is differentiation in the results of internal and external self-assessment) in the last place with relative weight (72.60%), the overall score for the field of maximizing competitiveness and profitability has a relative weight and value (74.59%) which is high, i.e., there is a high level of maximization of competitiveness and profitability in the technical colleges under study.

The researchers attribute this finding to the very difficult circumstances faced by the technical colleges in the Gaza Strip. There is an increase in the chances of college graduates in employment for universities and other institutions. The labor market needs technical and professional skills.

Table 13: Frequency, Mean, Standard Deviation, Percentages, Order, and Value of "T" of Responses of Sample Members in All Fields and Grade of College of Measure (Lean Management)

No.	Item	Arithmetic Mean	Standard Deviation	"T" Value	Relative Weight%	Item Order	Morality P- Value
1.	Reducing waste	3.9778	0.75854	19.507	79.56%	1	0.000
2.	Reducing costs	3.7840	0.73998	15.998	75.68%	3	0.000
3.	Improving service	3.7262	0.86324	12.703	74.52%	5	0.000
4.	Responding to customer requirements	3.9569	0.66582	21.700	79.14%	2	0.000
5.	Maximizing competitiveness and profitability	3.7295	0.75547	14.581	74.59%	4	0.000
Total Domain		3.8347	0.55054	22.944	76.69%		0.000

The tabular value of "T" is at the level of freedom (228) and at the level of significance (0.05) = 1.65

The tabular value of "T" is at the degree of freedom (228) and at the level of significance (0.01) = 2.34

Table (13) shows that in the T test for all related fields, the value of T is greater than the T value. Thus, there is a statistical significance of the relative weight of these fields. The first field (reduction of waste) The first with a relative weight of (79.56%), while the field of (responding to customer requirements) came in second place with relative weight (79.14%), followed by field (cost reduction) in third place with relative weight (75.68%), then the field (maximizing competitiveness and profitability) in fourth place with relative weight (74.59%) while the field of (service improvement) ranked last with a relative weight of (75.19%) the overall degree of lean management has a relative weight and value (76.69%) which is a high degree, that is, there is a high level of supervisory management in the technical colleges under study, and this indicates the validity of the second hypothesis.

Second hypothesis test:

H02: There are statistically significant differences at the level of a ≤ 0.05 in the dimensions of the lean management depending on the college variable.

To test this hypothesis, the analysis of mono-variance was used as in the following table:

Table 14: Analysis of the single variance One WAY ANOVA to find differences in the dimensions of Lean management depending on the macro variable

		Sum of Squares	Df	Mean Square	F	Sig.
Reducing waste	Between Groups	5.446	5	1.089	1.932	.090
	Within Groups	125.739	223	.564		
	Total	131.186	228			
Reducing costs	Between Groups	15.394	5	3.079	6.276	.000
	Within Groups	108.905	222	.491		
	Total	124.299	227			
Improving service	Between Groups	22.543	5	4.509	6.827	.000
	Within Groups	146.613	222	.660		
	Total	169.156	227			
Responding to customer requirements	Between Groups	7.141	5	1.428	3.391	.006
	Within Groups	93.491	222	.421		
	Total	100.631	227			
Maximizing competitiveness and profitability	Between Groups	20.167	5	4.033	8.186	.000
	Within Groups	109.390	222	.493		
	Total	129.557	227			
Total Domain	Between Groups	3.698	5	.740	2.435	.036
	Within Groups	67.717	223	.304		
	Total	71.415	228			

The following table shows the existence of statistically significant differences according to the macro change in the application of Lean management in all dimensions and the overall grade except after reducing the waste. This confirms the validity of the hypothesis in general and to know the direction of the differences:

Table 15: Scheffe Test results for the direction of differences and their significance in the post-cost reduction due to the macro variable

College	CIS=3.8297	UCAS=3.7282	CCA=4.0288	PTC=4.0333	GTC=3.2177
CIS=3.8297	-				
UCAS=3.7282	-0.101526	-			
CCA=4.0288	0.199059	0.300585	-		
PTC=4.0333	0.203546	0.305072	0.004487	-	
GTC=3.2177	-0.612045*	-0.510519	-0.811104*	-0.815591*	-

College	CIS=3.8297	UCAS=3.7282	CCA=4.0288	PTC=4.0333	GTC=3.2177
CST=3.6818	-0.147969	-0.046443	-0.347028	-0.351515	0.464076

* Sig. at level of significance (0.05)

We note from the previous table that there are differences in the reduction of costs between the GTC, the CIS, the CCA, and the PTC in favor of the last colleges. And funded through it and not from the fees of students and therefore there is a good disbursement on this college more than other colleges that rely heavily on the fees of students or the Palestinian government with limited financial possibilities.

Table 16: Scheffe Test results for the direction of differences and their significance after improvement of service due to the macro variable

College	CIS=3.8670	UCAS=4.1612	CCA=3.2307	PTC=3.7666	GTC=3.6747
CIS=3.8670	-				
UCAS=4.1612	0.294211	-			
CCA=3.2307	-0.636252*	-0.930463*	-		
PTC=3.7666	-0.100355	-0.394565	0.535897	-	
GTC=3.6747	-0.192290	-0.486501	0.443962	-0.091935	-
CST=3.7045	-0.162476	-0.456686	0.473776	-0.062121	0.029814

* Sig. at level of significance (0.05)

From the previous table, there are differences in the improvement of service between and between the College of the Far Society (CCA) and between the University College of Applied Sciences (UCAS) and the College of Intermediate Studies (CIS) for the other two kidneys. The results also indicate that there are no differences in this dimension among the other colleges.

Table 17: Scheffe Test results for the direction of differences and their significance in response to customer requirements due to the macro variable

College	CIS=3.9840	UCAS=4.2010	CCA=3.7307	PTC=3.9833	GTC=3.7795
CIS=3.9840	-				
UCAS=4.2010	0.282156	-			
CCA=3.7307	0.096955	-0.185201	-		
PTC=3.9833	0.135417	-0.146739	0.038462	-	
GTC=3.7795	0.285954	0.003799	0.188999	0.150538	-
CST=4.1363	-0.228220	-0.510375*	-0.325175	-0.363636	-0.514174*

* Sig. at level of significance (0.05)

From the previous table, there are differences in the response to customer requirements between the University College of Science and Technology (CST) and the University College (UCAS), Gaza Training College (GTC).

Table 18: The results of the Scheffe Test for the direction of differences and their significance after maximizing competitiveness and profitability due to the macro variable

College	CIS=3.7606	UCAS=3.9257	CCA=3.4423	PTC=3.8166	GTC=4.1935
CIS=3.7606	-				
UCAS=3.9257	0.165086	-			
CCA=3.4423	-0.318331	-0.483417	-		
PTC=3.8166	0.056028	-0.109058	0.374359	-	

College	CIS=3.7606	UCAS=3.9257	CCA=3.4423	PTC=3.8166	GTC=4.1935
GTC=4.1935	0.432910	0.267824	0.751241*	0.376882	-
CST=3.1590	-0.601547	-0.766634*	-0.283217	-0.657576	-1.034457*

* Sig. at level of significance (0.05)

From the previous table, there are differences in maximizing competitiveness and profitability between the College of Science and Technology (CST) and the University College (UCAS) and the Gaza Training College (GTC).

Table 19: Results of the Scheffe Test for the direction of differences and their significance in Total Degree due to the macro variable

College	CIS=3.8841	UCAS=4.0593	CCA=3.7379	PTC=3.9458	GTC=3.7056
CIS=3.8841	-				
UCAS=4.0593	0.175215	-			
CCA=3.7379	-0.146134	-0.321349	-		
PTC=3.9458	0.061719	-0.113496	0.207853	-	
GTC=3.7056	-0.178469	-0.353685*	-0.032336	-0.240188	-
CST=3.7897	-0.094342	-0.269557	0.051792	-0.156061	0.084128

* Sig. at level of significance (0.05)

From the previous table, there are differences in the overall degree of application of the Lean administration between the University College of Applied Sciences (UCAS) and the Gaza Training College (GTC) in favor of UCAS. The results indicate that there are no differences in this dimension among the other colleges.

Third hypothesis test:

H03: There are statistically significant differences at the level of $\alpha \leq 0.05$ in the dimensions of the lean management according to the variable years of experience.

To test this hypothesis, the analysis of mono-variance was used as in the following table:

Table 20: Analysis of the single variance ONE WAY ANOVA to find differences in the dimensions of Lean management according to the variable years of experience

		Sum of Squares	df	Mean Square	F	Sig.
Reducing waste	Between Groups	.176	2	.088	.152	.859
	Within Groups	131.010	226	.580		
	Total	131.186	228			
Reducing costs	Between Groups	4.293	2	2.146	4.024	.019
	Within Groups	120.007	225	.533		
	Total	124.299	227			
Improving service	Between Groups	.202	2	.101	.135	.874
	Within Groups	168.954	225	.751		
	Total	169.156	227			
Responding to customer requirements	Between Groups	1.312	2	.656	1.486	.228
	Within Groups	99.319	225	.441		
	Total	100.631	227			
Maximizing competitiveness and profitability	Between Groups	2.824	2	1.412	2.507	.084
	Within Groups	126.734	225	.563		
	Total	129.557	227			
Total Domain	Between Groups	.480	2	.240	.765	.467
	Within Groups	70.935	226	.314		
	Total	71.415	228			

In the previous table, there are no statistically significant differences in the application of the Lean administration according to the variable years of experience, except after the cost reduction. This confirms the incorrect hypothesis.

In order to determine the direction of the differences, the post- Scheffe test was used as follows:

Table 21: Scheffe Test results for the direction of differences and their significance after cost reduction due to variable years of experience

Years of Experience	less than 5 years = 4.0277	5-10 years = 3.9187	More than 10 years =3.6673
Less Than 5 Years = 4.0277	-		
5-10 Years = 3.9187	-0.109028	-	
More Than 10 Years =3.6673	-0.360470*	-0.251442	-

* Sig. at level of significance (0.05)

We note from the previous table that there are differences in post-cost reduction from the point of view of experience (5-10 years) with experience (less than five years) for those with experience (less than five years).

12. CONCLUSIONS

1. The results of the study showed that the technical colleges achieved a high level of lean management, with total relative weight (76.69%).
2. The results of the study showed a high level of efficient management areas (reducing waste, reducing costs, improving service, and responding to customer requirements, maximizing competitiveness and profitability) in technical colleges in the Gaza Strip. (79.56%), in the second place came the field (responding to customer requirements) and a relative weight (79.14%), in the third place came the field (cost reduction) and a relative weight (75.68%), in the fourth place came the field (maximizing competitiveness and profitability) and relative weight (74.59%), in the fifth and final place came the field of (service improvement) and a relative weight (74.52%).
3. The results confirmed the existence of statistically significant differences in the application of the dimensions of the lean management among technical colleges.
4. The results showed that there were no differences in the application of lean management according to the levels of experience, except after the reduction of costs, where there were differences from the point of view of those with low experience.

13. RECOMMENDATIONS

According to the contents of the study, and in light of what is based on the results of the findings recommend the following:

1. The need to increase the attention to the dimensions of achieving the Lean management because of its role in the development and sustainability of technical education departments through enhancing and improving operations in technical colleges, especially in light of the difficult conditions experienced by the Gaza Strip and the scarcity of resources.
2. The importance of urging decision makers in technical colleges to develop efficient management mechanisms and applications in terms of reducing waste, reducing costs, improving service, responding to customer requirements, and maximizing competitiveness and profitability, commensurate with the capabilities of these colleges.
3. Developing work procedures with new innovative methods that will accomplish the various tasks quickly and accurately, and provide the effort, time and costs.
4. The researchers urged further studies of the same variables as the current study in lean management and their application to other sectors.

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