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The degree of applying quality management database in Jordanian food companies from managers perspectives

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Abstract

Objectives: This research aims to investigate the degree of applying quality management database in Jordanian food companies from manager's perspectives. Also, it aims to investigate if there any statistically differences in degree of applying quality management database in Jordanian food companies a degree distributes to the gender and experience

Methodology: The study used a descriptive analytical approach. The data were collected from (88) managers from four Food companies in Amman, Jordan who were chosen randomly. Using a questionnaire developed for this purpose.

Finding: -The findings of the study shows that the degree of applying quality management database in Jordanian food companies from managers perspectives is high with mean (3.81) and Std. Dev (0.94), Also, the finding of the study shows that there no statistically differences at the level ($\alpha = 0.05$) in degree of applying quality management database in Jordanian food companies from managers perspectives

Keywords: Quality management database; Applying; Jordanian food companies; Managers.

1. Introduction

Organizations striving for longevity and growth must navigate the challenges of today's volatile environment. Whether large or small, they face a range of internal and external challenges that can impact their success. Rapid technological advancements, frequent changes in various aspects of life, and an overall sense of unpredictability necessitate proactive measures from organizations. They must swiftly and effectively address ongoing issues to prevent them from escalating into full-blown crises (Luburić, 2019) [1].

Quality Management (QM) is a managerial ideology and methodology centered on perpetually enhancing the quality of products, processes, and services within a company. It entails the active engagement of all personnel, ranging from top-level management to frontline staff, in striving for excellence in quality.

Effective quality management within a firm's database information is vital for ensuring the accuracy, dependability, and security of data, all of which significantly influence the organization's overall success. Quality data plays a crucial role in facilitating well-informed decision-making, boosting operational efficiency, increasing customer satisfaction, and ensuring compliance with regulations. Conversely, companies that lack robust quality management practices may encounter issues such as data errors, inconsistencies, and vulnerabilities, resulting in widespread ramifications.

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High-quality data is essential for making informed, data-driven decisions. Decision-makers rely on accurate and up-to-date information to measure performance, identify opportunities, and mitigate risks effectively. Poor-quality data can result in incorrect judgments, which can adversely impact the organization's strategic direction.

Databases indeed serve as invaluable assets for companies and organizations, with essential components like information about products and services. The evaluation and influence of customers play a significant role in shaping this particular type of data.

High-quality data enables organizations to gain deeper insights into customer preferences and behaviors. A study by Lee et al. (2002) underscores the significance of assessing data quality for providing exceptional customer experiences. Precise customer data facilitates the delivery of personalized services, targeted marketing efforts, and streamlined communication. [2]

1.1. Problem Statement

In the last time, there is increasing demand for local product has been observed. These increasing demands due to the process of boycott goods of foreign products. This encourages companies in Arab world to achieve their marketing goals. Jordanian companies are among these Arab companies.

It was necessary to apply the principles of quality management to address this issue. This involved making some modifications to the workflow, such as providing delivery services, increasing the number of employees, implementing a two-shift work system (morning and evening), and improving some of the machinery used to enhance and increase the production line.

This study conducted to discuss the degree of applying quality management of data information in some Jordanian Food companies from HR employees. The study problem can be formed into the following questions: -

- What is the degree of applying quality management of data information in some Jordanian Food companies from HR employees' perspective?
- Are there statistically significant differences at the significance level ($\alpha=0.05$) in the degree of applying quality management of data information in some Jordanian Food companies from HR employee's perspectives due to the variables gender and experience?

1.2. The Study Hypotheses

Based on the results concluded in previous studies and upon the theoretical framework of this study, the hypotheses of the study can be drafted as follows:

- Ho1: - The degree of applying quality management of data information in some Jordanian Food companies from HR employees' perspective is high.
- Ho2: There are not any statistically significant differences at the significance level ($\alpha=0.05$) in the degree of applying quality management of data information in some Jordanian Food companies from HR employee's perspectives due to the variables gender and experience

1.3. Study Objectives:

The objectives of this study are:

- Investigate the degree of applying quality management of data information in some Jordanian Food companies from HR employees' perspective.
- Investigate if there are any statistically significant differences at the significance level ($\alpha=0.05$) in the degree of applying quality management of data information in some Jordanian Food companies from HR employee's perspectives due to the variables gender and experience.

1.4. Study Importance

There are set of significance for studying the degree of applying quality management on the company's database from HR employees' perspectives from different sides: -

- Proving that the understanding customer preferences, behavior, and needs requires accurate data, it allows businesses to provide personalized services, targeted marketing, and efficient customer service.

- Proving that Quality management within a company's database plays a pivotal role in the recognition and reduction of risks.
- Exploring the degree of applying quality management on the behavior of food companies provides an opportunity to discover ways to improve operational processes.
- Examining quality management practices can shed light on their impact on resource utilization. This study seeks to identify strategies for food companies to optimize resources like raw materials, energy, and time, fostering sustainability and cost-effectiveness.

2. Literature Review

Indeed, a great deal of research has been done in the literature already in existence regarding the impact of quality management on business success. Here is a quick summary of the main conclusions.

Despite some criticism, quality management (QM), regarded as one of the most enduring and extensively used practices in contemporary operations management, has attracted significant attention from academia and industry (Longenecker, Scuzzier, and Stansfield, 1994) [3]. The QM movement began in Japan in the 1950s and gained traction in the United States and Europe in the 1980s. QM is one of the top priorities for many firms these days. The term total quality management (TQM) is frequently used to refer to it (Stashevsky and Elizur, 2021).[4]

Many academic research looks at the relationships between Quality Management (QM) procedures and how they affect different elements, but their findings are frequently inconsistent. Overall Quality Management (TQM) and QM practices are generally positively correlated with firm performance; they are also positively correlated with factors such as product quality, product and process performance, perceived quality, quality drivers, cost reduction, increased customer satisfaction, and improved financial performance. Generally speaking, a large corpus of research highlights the positive impact of QM procedures on performance (Zu, 2009). [5]

Flynn et al. (1995) found that 79% of the companies surveyed planned to "increase or greatly increase" their QM initiatives over the following three years, and 83% of the organizations examined reported "positive or very positive" experiences with quality management (QM). It is important to remember, nevertheless, that research also shows that QM practices are connected with variable performance outcomes.[6]

Murphy (2016) underlined that, in spite of a number of challenges, small and medium-sized businesses must use quality management methods in order to accomplish business gains. Important elements are frequently emphasized in the literature, such as: 1. Leadership Commitment: Developing commitment requires educating and assisting upper management. 2. Employee Dedication to QMS: Establishing a smooth transition from outdated methods, providing good training, and refraining from harsh implementation are all ways to win over employees' trust and dedication to the Quality Management System (QMS). 3. Resource Availability: Making sure that the resources required are available. This can be accomplished by working together with suppliers, vendors, and business partners through strategic planning and resource usage. [7]

Among the tools used in quality management are checklists, which are useful for quickly and effectively compiling information. They assist staff members in recognizing problems that prevent a company from producing high-quality goods that either meet or surpass the expectations of its clients. A detailed list of issues that have been recognized and need to be addressed makes up a checklist. Every problem that is fixed is crossed off as it is put into practice. Workers can evaluate if system modifications have produced long-term benefits for the company by using the checklist. D. C. Montgomery (2019). [8]

2.1. Previous Studies

The study of Al – Edwan (2020) [9] aims to determine the extent to which Jordanian institutions were using total quality management standards in relation to international norms. All academic department heads at Jordanian universities for the academic year (2015–2016) were included in the study population. The stratified random approach was used to choose the study sample from the study population b. The researcher created a study tool with the following domains in order to meet the study's goals: vision, mission, objectives, operations management, continuous improvement, beneficiaries' satisfaction, and assessment. The findings demonstrated that Jordanian universities use whole quality management standards to a medium extent and that there are no statistically significant differences at the $(0.05=\alpha)$ level across the factors of gender, years of experience, and specialization. Although there are variations that are attributable to the area variable, the southern region is preferred. Based on the findings, the researcher suggested that in order to activate the standards of overall quality management, training sessions and field workshops should be held.

The study of Werfalli et al (2020) aims to define the fundamental prerequisites for creating a system of that caliber. Additionally, a methodical strategy to creating an effective and functional QMS will be provided in this paper. The construction industry's primary purpose is fulfilled by successful construction projects that prioritize Safety, Quality, Cost, Delivery, and Morale (SQCDM). For a construction company, the QMS's function is not discrete but rather interwoven with every managerial and operational task related to the building project. In the construction sector, quality assurance, quality control, quality planning, and risk and cost management are all referred to as the quality management system (QMS).[10]

El-Tohamy (2015) conducted a study that aimed to raise awareness of the significance of implementing total quality management (TQM) and its impact on the effectiveness of hospitals in particular as well as other organizations. The primary goal of the current study was to ascertain how the implementation of Total Quality Management (TQM) affected the overall effectiveness of Jordan's governmental hospitals that had received accreditation from the Health Care Accreditation Council (HCAC). The study population consisted of all medical professionals employed for more than three years at the five federal hospitals accredited by the HCAC. Twelve ninety employees were included in the study sample. Eighty-six percent of the surveys that were circulated had responses. The following were the tenets of TQM: employee involvement, teamwork, continuous improvement, customer focus, leadership commitment to quality, and education and training. The results of the study demonstrated that every TQM principle significantly affected the overall effectiveness of the hospital ($p < 0.05$). Hospital performance is strongly predicted by TQM, according to multiple linear regression analysis (Beta = 0.818, $t = 46.613$, $R^2 = 0.669$, and p value = 0.000). When combined, the TQM principles improve Jordan's governmental hospitals that are HCAC accredited in terms of overall hospital effectiveness. [11].

The study of Mehralizadeh (2010) aimed to study to what extent the idea of a total quality management (TQM) system (Deming, ISO, Baldrige, and EFQM) which is borrowed from business is applicable in a higher education institution. A meta-evaluation methodology is used which emphasizes Røvik's seven theoretical assumptions on how management ideas are spread in a given sector. The findings of this study reveal that that in many cases the current evidence of application of TQM is not compatible with the assumed criteria of the Røvik model. The quality systems are not often socially acceptable, they do not follow a clear philosophy and theory, do not show the productivity of institutions, are less progressive, have low harmonies, unrealistically publicized but in terms of individualized aspects there are some supportive successful case applied in non-academic higher education.[12]

3. Research Methodology

In order to achieve the goal of the study, researcher follows the descriptive analytical method in the process of collecting data, test hypothesis and addressing research questions. This method was also used to evaluate the answers of the target of the study, their attitudes, opinions and the demographic information.

3.1. Study population and sample

The study population consists of all companies' managers in HR departments, and a random sample estimated (88). A questionnaire was designed to suit the current research was used as a tool for the study. It was distributed electronically via Google Forms and a questionnaire 41(46.5%) of the total study sample was retrieved. SPSS program was used to examine the collected data.

Table 1 Illustrates the demographic characteristics of the sample study.

Demographic information		Frequency	Percent %	Demographic information		Frequency	Percent %
Gender	Male	61	65%	Company	Gulf Food Products Company	32	34%
	Female	33	35%		Khabbaz	24	26%
Age	Less than 30	18	19%		Shams Al Urdon	21	22%
	30-40	45	48%		Jawad Modern Bakeries Co.	17	18%
	41-50	23	24%	Less than 5	12	13%	

	Above 50	8	9%	Experience	6-10	23	24 %
Academic qualification	Bachelor	76	81%		11-15	38	41. %
	High Education	18	19%		16-20	21	22%

3.2. Data collection

Two different sources were used to obtain the information needed to complete the objectives of the study. The use of secondary sources began with the use of theoretical and scientific literature. These sources played an essential role in helping the researcher collect information, build the theoretical framework of the study, improve its objectives, and review the main results. In addition, it was of great importance in developing the study, and books, university dissertations, scientific research articles, peer-reviewed journals, and academic works published in Arabic and English constitute secondary sources.

3.3. Data Analysis Methods

The following statistical methods have been used in order to achieve the study objectives and testing hypotheses: -

1- Descriptive Statistic: frequencies, means, and standard deviations have been determined to identify characteristics of study sample and opinions and views of sample individuals on the questionnaire statements.

4. Results and discussion

T-test to examine the study hypotheses:

Questionnaire Answers analysis & Hypotheses Testing

4.1. A- Study Sample Characteristics

It is evident from analyzing the answers of the questionnaire first section, that the study sample is appropriately qualified at the academic level, as all of the sample individuals are holders of bachelor degree as minimum.

It is noted that the degree of their participation in decision-making is of a high level, as the rate of those who constantly or mostly contribute to decision-making amounted to around 95%. The long experience of respondents in computer-based banking work has enhanced the confidence in the concluded results, as the rate of those who have such experience of no less than six years amounts to approximately (96%), which is a high rate.

4.1.1. First Hypothesis Testing:

Ho 1: The degree of applying quality management of data information in some Jordanian Food companies from HR employees' perspective is high.

To test the degree of applying quality management of data information in some Jordanian Food companies from HR employees' perspective, the researcher measured the mean and Std. Dev for the paragraphs of the questionnaire. As it is shown in table (2).

Table 2 Results of measuring the degree of applying quality management of data information in some Jordanian Food companies from HR employees' perspective

Item	Mean	Std.Dev	Degree	Item	Mean	Std.Dev	Degree
Item 1	4.35	1.21	Very high	Item1 1	3.70	0.85	high
Item2	4.28	1.01	Very high	Item 12	3.68	0.89	moderate
Item 3	4.20	1.24	Very high	Item 13	3.60	0.84	moderate
Item 4	4.11	0.98	Very high	Item 14	3.52	0.80	moderate
Item 5	4.05	0.81	Very high	Item 15	3.48	0.97	moderate

Item 6	3.95	0.88	high	Item 16	3.45	0.92	moderate
Item 7	3.90	0.91	high	Item 17	3.40	0.81	moderate
Item 8	3.85	0.86	high	Item 18	3.35	0.90	moderate
Item 9	3.80	0.77	high	Item 19	3.30	0.93	moderate
Item 10	3.75	0.84		Item 20	3.25	0.89	moderate
The total of applying degree			3.81	0.96	high		

Table No. 3 outlines the results of the statistical analysis of applying quality management of data information in some Jordanian Food companies from HR employees' perspective. The result shows that the degree of is high with mean (3.81) and Std.Dev (0.96).

Ho 2: There are not any statistically significant differences at the significance level ($\alpha=0.05$) in the degree of applying quality management of data information in some Jordanian Food companies from HR employees' perspectives due to the variables gender and experience

To test differences in degree of degree of applying quality management data base between male and female, a t- test has been done and table (2) illustrate this.

Table 3 Results of measuring differences in degree of applying quality management data base between male and female

Gender	Frequency	Mean	Std.Dev	t	Sig
male	47	3.92	1.04	0.70	0.244
Female	41	3.71	0.96		

Table (2) illustrate that is no differences in degree of between applying quality management data base male and female, since sig value is larger than the (0.05). we don't accept the null Hypothesis.

To test differences in degree of degree of applying quality management data base and experience years, the researcher uses ANCOVA – one way, as it is shown in table (4).

Table 4 Results of measuring differences in degree of degree of applying quality management data base and experience year by ANCOVA,

ANOVA ^s						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.776	1	3.176	7.214	.240 ^a
	Residual	62.324	87	.622		
	Total	65.500	88			

Table (3) illustrate that is no differences in degree of applying quality management data base and experience year at the level ($\alpha=0.5$), since sig value is larger than the (0.05). We don't accept the null Hypothesis

5. Conclusion

Managers of managers have a high degree toward applying quality management database in Jordanian food companies, this due to its role in enabling a business to protect its reputation, accelerate change and meet customer needs. It enables you to demonstrate governance, risk and compliance best practices. The right QMS also provides protection in the face of litigation. Moreover, the study reveals that there are no statistically differences at the level ($\alpha= 0.05$) attributed to gender diversity and year experience and this because both male and female have the same believe about the importance of applying quality management database.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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